267969

STIC-EIC1600/2900

From: CRAIG RICCI [craig.ricci@uspto.gov]
Sent: Thursday, July 31, 2008 2:03 PM
To: STIC-EIC1600/2900
Cc: NPL Feedback
Subject: Search Request, Case/Application No.: 10587637

Requester: **CRAIG RICCI (P/1614)**
Art Unit: **GROUP ART UNIT 1614**
Employee Number: [redacted]
Office Location: **CLC 33003**
Phone Number: **(571)270-5864**

Case/Application number: **10587637**
Priority Filing Date: **2003**
Format for Search Results: **No selection**
Meaning of unusual acronyms or initialisms:

Identify the novelty:

Additional comments:
Do not limit search to just (S)-configuration of compound.

Attachment: **Yes (STIC.doc)**

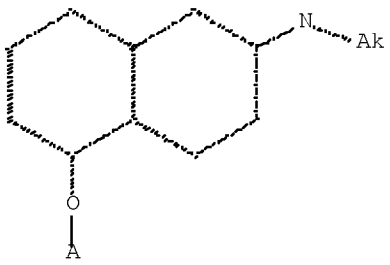
MS
7/31/2008

Search History

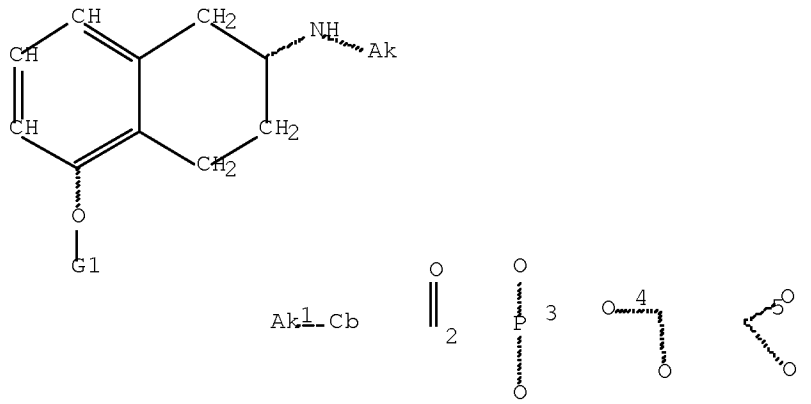
```
=> FILE HCAPLUS
FILE 'HCAPLUS' ENTERED AT 14:17:19 ON 01 AUG 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)
```



```
FILE COVERS 1907 - 1 Aug 2008  VOL 149 ISS 5
FILE LAST UPDATED: 30 Jul 2008  (20080730/ED)

HCAplus now includes complete International Patent Classification (IPC)
reclassification data for the second quarter of 2008.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.
'OBI' IS DEFAULT SEARCH FIELD FOR 'HCAPLUS' FILE

=> D QUE L21
L3              STR
```




```
Structure attributes must be viewed using STN Express query preparation.
L4         1920 SEA FILE=REGISTRY SSS FUL L3
L14             STR
```



G1 Cy,Ak,SO2,[@1],[@2],[@3],[@4],[@5]

Structure attributes must be viewed using STN Express query preparation.

L16	22	SEA	FILE=REGISTRY	SUB=L4 SSS FUL L14	
L18	40	SEA	FILE=HCAPLUS	ABB=ON PLU=ON	L16
L19	144	SEA	FILE=HCAPLUS	ABB=ON PLU=ON	SCHELLER D?/AU
L20	1242	SEA	FILE=HCAPLUS	ABB=ON PLU=ON	HANSEN K?/AU
L21	1	SEA	FILE=HCAPLUS	ABB=ON PLU=ON	(L19 OR L20) AND L18

=> D IBIB ED ABS HITSTR 1

L21 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:564577 HCAPLUS Full-text
DOCUMENT NUMBER: 143:71801
TITLE: (S)-2-N-propylamino-5-hydroxytetralin as a D3 agonist, and therapeutic use thereof
INVENTOR(S): Scheller, Dieter; Hansen, Klaus
PATENT ASSIGNEE(S): Schwarz Pharma A.-G., Germany
SOURCE: PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005058296	A1	20050630	WO 2004-EP14143	20041213
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE 10359528	A1	20050728	DE 2003-10359528	20031218
AU 2004298341	A1	20050630	AU 2004-298341	20041213

CA 2547820	A1	20050630	CA 2004-2547820		20041213
EP 1694318	A1	20060830	EP 2004-803781		20041213
EP 1694318	B1	20070314			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU					
CN 1929829	A	20070314	CN 2004-80037389		20041213
BR 2004017739	A	20070403	BR 2004-17739		20041213
AT 356621	T	20070415	AT 2004-803781		20041213
JP 2007514674	T	20070607	JP 2006-544295		20041213
ES 2282923	T3	20071016	ES 2004-803781		20041213
MX 2006PA06696	A	20060831	MX 2006-PA6696		20060613
HK 1094421	A1	20070803	HK 2007-101358		20070205
US 20070197480	A1	20070823	US 2007-587637		20070206
PRIORITY APPLN. INFO.:			DE 2003-10359528	A	20031218
			WO 2004-EP14143	W	20041213

OTHER SOURCE(S): MARPAT 143:71801

ED Entered STN: 30 Jun 2005

AB The invention discloses a medicament containing (S)-2-N-propylamino-5-hydroxytetralin, or a salt or prodrug thereof. As a D3 agonist, (S)-2-N-propylamino-5-hydroxytetralin is suitable particularly for the treatment of DOPA-sensitive movement disorders.

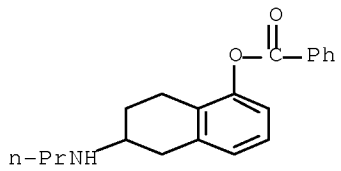
IT 855127-36-5

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

((S)-2-N-propylamino-5-hydroxytetralin as D3 agonist, and therapeutic use)

RN 855127-36-5 HCAPLUS

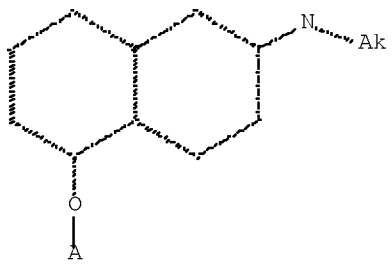
CN 1-Naphthalenol, 5,6,7,8-tetrahydro-6-(propylamino)-, 1-benzoate (CA INDEX NAME)



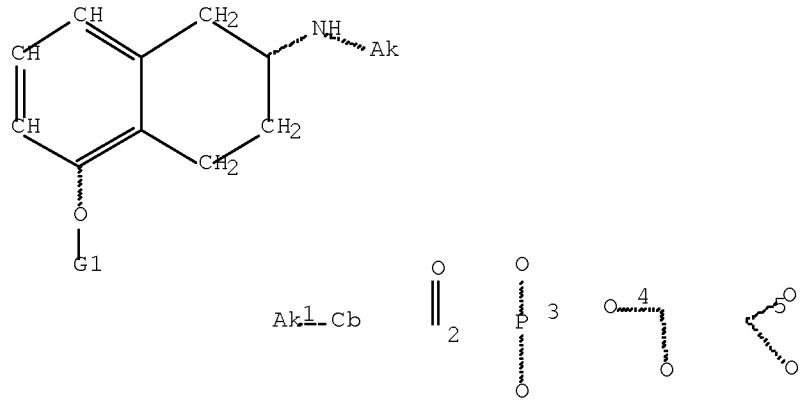
REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

Structure Search

=> D QUE L18
L3 STR



Structure attributes must be viewed using STN Express query preparation.
L4 1920 SEA FILE=REGISTRY SSS FUL L3
L14 STR



G1 Cy,Ak,SO2,[@1],[@2],[@3],[@4],[@5]

Structure attributes must be viewed using STN Express query preparation.
L16 22 SEA FILE=REGISTRY SUB=L4 SSS FUL L14
L18 40 SEA FILE=HCAPLUS ABB=ON PLU=ON L16

=> S L18 NOT L21
L22 39 L18 NOT L21

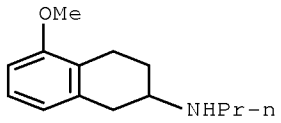
=> D IBIB ED ABS HITSTR L22 1-39

L22 ANSWER 1 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2008:361174 HCAPLUS Full-text
DOCUMENT NUMBER: 148:569308
TITLE: Simultaneous enantioseparation of antiparkinsonian medication rotigotine and related chiral impurities by capillary zone electrophoresis using dual cyclodextrin system

AUTHOR(S): Chu, Bao-Lin; Guo, Baoyuan; Zuo, Hongjian; Wang, Zhihua; Lin, Jin-Ming
CORPORATE SOURCE: State Key Laboratory of Chemical Resource Engineering, College of Science, Beijing University of Chemical Technology, Beijing, 100029, Peop. Rep. China
SOURCE: Journal of Pharmaceutical and Biomedical Analysis (2008), 46(5), 854-859
CODEN: JPBADA; ISSN: 0731-7085
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 25 Mar 2008

AB A dual cyclodextrin (CD) system consisting of sulfated β-CD (S-β-CD) and methyl-β-CD (M-β-CD) modified capillary zone electrophoresis (CZE) method was proposed to sep. the antiparkinsonian drug rotigotine and related chiral impurities (2-(N-propylamino)-5- hydroxytetralin, 2-(N-propylamino)-5-methoxytetralin). The method was optimized by varying the CD type, the buffer pH, individual CD concentration of the dual system and the ionic strength of background electrolyte. Under the optimum conditions, i.e. 2% (w/v) S-β-CD and 2% (w/v) M-β-CD in 100 mM sodium phosphate (pH 2.5) as the running buffer, separation voltage -20 kV, detected at 200 nm and temperature controlled at 20°, a satisfactory separation of the six analytes was accomplished. The optimized method was validated for specificity, precision, linearity, accuracy and stability using sodium benzenesulfonate as the internal standard The relative standard deviation for migration time was less than 0.58%, and 3.78% for peak area ratio. The linearity ranged from 0.005 to 0.25 mM. The recovery ranged from 95.9% to 108.3%. The limits of detection and limits of quantification for each enantiomer were 0.003 and 0.01 mM, resp. This method was used to evaluate the chiral purity of five batches of rotigotine.

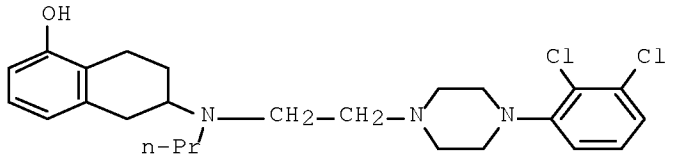
IT 3899-07-8, 2-(N-Propylamino)-5-methoxytetralin
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(simultaneous enantiosepn. of antiparkinsonian medication rotigotine and related chiral impurities by capillary zone electrophoresis using dual cyclodextrin system)
RN 3899-07-8 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)



REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 2 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:1419171 HCAPLUS Full-text
DOCUMENT NUMBER: 148:182426
TITLE: Further Structure-Activity Relationships Study of Hybrid 7-{[2-(4-Phenylpiperazin-1-yl)ethyl]propylamino}-5,6,7,8-tetrahydronaphthalen-2-ol Analogues: Identification of a High-Affinity D3-Preferring Agonist with Potent in Vivo Activity with Long Duration of Action
AUTHOR(S): Biswas, Swati; Zhang, Suhong; Fernandez, Fernando;

Ghosh, Balaram; Zhen, Juan; Kuzhikandathil, Eldo; Reith, Maarten E. A.; Dutta, Aloke K.
CORPORATE SOURCE: Department of Pharmaceutical Sciences, Wayne State University, Detroit, MI, 48202, USA
SOURCE: Journal of Medicinal Chemistry (2008), 51(1), 101-117
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 148:182426
ED Entered STN: 13 Dec 2007
GI

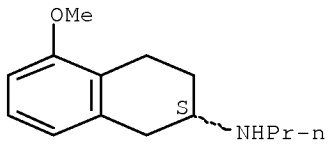


I

AB This paper describes an extended structure-activity relationships study of aminotetralin-piperazine-based hybrid mols. developed earlier for dopamine D2/D3 receptors. Various analogs as positional isomers have been developed where location of the phenolic hydroxyl group has been varied on the aromatic ring. Between two catechol derivs., compound 6e with a two methylene linker length exhibited higher affinity and selectivity for D3 over D2 receptors over compound 6f with four methylene linkers (D2/D3 = 50.6 vs 7.51 for 6e and 6f, resp.). In general, the (-)-isomer was more potent than the (+)-isomeric counterpart. Binding results indicated highest selectivity for D3 receptors in compound (-)-10 (Ki = 0.35 nM; D2/D3 = 71). In the 5-hydroxy series, highest selectivity for D3 receptors was exhibited by compound (-)-25 (I) (Ki = 0.82 nM; D2/D3 = 31.5). Most potent compds. exhibited binding and functional affinities at the sub-nanomolar level for the D3 receptor. Binding assays were carried out with HEK-293 cells expressing either D2 or D3 receptors by using tritiated spiperone as radioligand for competition studies to evaluate inhibition consts. (Ki). A functional assay of selected compds. for stimulating GTPγS binding was carried out with CHO cells expressing human D2 receptors and AtT-20 cells expressing human D3 receptors. The functional assay results indicated partial to full agonist characteristics of test compds. Compound (-)-25 was selected further for in vivo study to evaluate its potency in producing contralateral rotations in rats with unilateral lesion in the nigrostriatal region induced by neurotoxin 6-OHDA, a Parkinsonian animal model. Compound (-)-25 at 5 μmol/kg exhibited rotational activity that lasted beyond 12 h, whereas at a 1 μmol/kg dose the rotations lasted beyond 8 h.
IT 101403-24-1P 101403-25-2P
RL: PUR (Purification or recovery); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(piperazinyl naphthalenol derivs. as dopamine receptor agonists)
RN 101403-24-1 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, (2S)- (CA

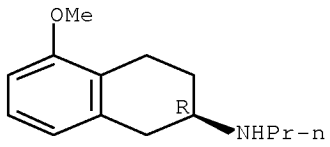
INDEX NAME)

Absolute stereochemistry. Rotation (-).

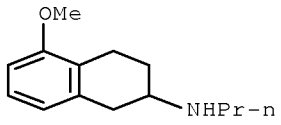


RN 101403-25-2 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, (2R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

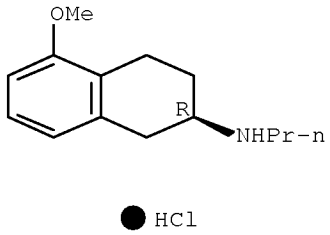


IT 3899-07-8P 93601-85-5P 93601-86-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(piperazinyl naphthalenol derivs. as dopamine receptor agonists)
RN 3899-07-8 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)



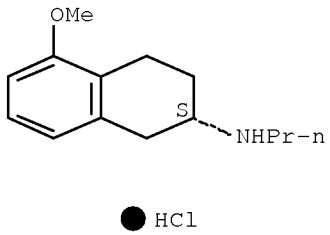
RN 93601-85-5 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, hydrochloride (1:1), (2R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 93601-86-6 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, hydrochloride (1:1), (2S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



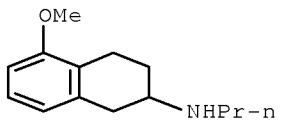
REFERENCE COUNT: 55 THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 3 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:873237 HCAPLUS Full-text
DOCUMENT NUMBER: 147:277913
TITLE: Improved method and kit for automated resolving agents, especially amino acid derivatives, and solvents selection
INVENTOR(S): Vaidya, Niteen A.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 29pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20070185346	A1	20070809	US 2006-347532	20060203
WO 2007092264	A2	20070816	WO 2007-US2800	20070131
WO 2007092264	A3	20071129		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT,

TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA
PRIORITY APPLN. INFO.: US 2006-347532 A2 20060203
ED Entered STN: 10 Aug 2007
AB The invention is related to a kit for improved identification of the optimal conditions for diastereomeric salt crystallization and the selection of the optimal resolving agents, especially amino acid derivs., and solvents, which include A. an array of containers wherein the array is a standard high throughput tray and the containers are a multiplicity of substantially identical containers or well plates each optionally sealed with a sealant or stoppers to avoid loss of chemical solvent; B. wherein each substantially identical container has a unique combination of resolving agent in each column and at least one suitable solvent in each row; and C. an instructional text to use said kit. The tray of 24, 48, 96 or more samples is examined simultaneously visually or by standard anal. techniques. Resolution of (±)-2-phenylpropionic acid was studied with both amines and acids as resolving agents. Strychnine in 96% ethanol was ideal system for (+)-isomer, while quinidine in 96% ethanol was the system of choice for (-)-isomer. Pyroglutamic acid in 70% isopropanol was ideal system for (+)-isomer, while malic acid in in 1-butanol was the system of choice for (-)-isomer.
IT 3899-07-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(resolving agent; method and kit for automated resolving agents, especially from amino acid derivs., and solvents selection)
RN 3899-07-8 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)



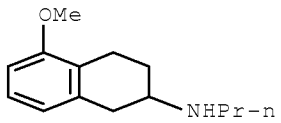
L22 ANSWER 4 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1999:767212 HCAPLUS Full-text
DOCUMENT NUMBER: 132:233690
TITLE: Radiosynthesis and in vitro evaluation of 2-(N-alkyl-N-1'-11C-propyl)amino-5-hydroxytetralin analogs as high affinity agonists for dopamine D2 receptors
AUTHOR(S): Shi, Bingzhi; Narayanan, Tanjore K.; Yang, Zhi-Ying; Christian, Bradley T.; Mukherjee, Jogeshwar
CORPORATE SOURCE: Department of Internal Medicine/Nuclear Medicine, Kettering Medical Center, Wright State University, Dayton, OH, USA
SOURCE: Nuclear Medicine and Biology (1999), 26(7), 725-735
CODEN: NMBIEO; ISSN: 0969-8051
PUBLISHER: Elsevier Science Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 06 Dec 1999

AB We have developed radiotracers based on agonists that may potentially allow the in vivo assessment of the high affinity (HA) state of the dopamine D-2 receptors. The population of HA state, which is likely the functional state of the receptor, may be altered in certain diseases. We carried out radiosyntheses and evaluated the binding affinities, lipophilicity, and in vitro autoradiog. binding characteristics of three dopamine D-2 receptor agonists: (±)-2-(N,N-dipropyl)amino-5- hydroxytetralin (5-OH-DPAT), (±)-2-(N-phenethyl-N-propyl)amino-5- hydroxytetralin (PPHT), and (±)-2-(N-cyclohexylethyl-N-propyl)amino-5- hydroxytetralin (ZYY-339). In 3H-spiperone assays using rat striata, ZYY-339 exhibited subnanomolar affinity for D-2 receptor sites (IC50 = 0.010 nM), PPHT was somewhat weaker (IC50 = 0.65 nM), and 5-OH-DPAT exhibited the weakest affinity (IC50 = 2.5 nM) of the three compds. Radiosynthesis of these derivs., 2-(N-propyl-N-1'-11C-propyl)amino-5-hydroxytetralin (11C-5-OH-DPAT), 2-(N-phenethyl-N-1'-11C-propyl)amino-5-hydroxytetralin (11C-PPHT), and 2-(N-cyclohexylethyl-N-1'-11C-propyl)amino- 5-hydroxytetralin (11C-ZYY-339) was achieved by first synthesizing 11C-1-propionyl chloride and subsequent coupling with the appropriate secondary amine precursor to form the resp. amide, which was then reduced to provide the desired tertiary amine products. The final products were obtained by reverse-phase high performance liquid chromatog. (HPLC) purification in radiochem. yields of 5-10% after 60-75 min from the end of 11CO2 trapping and with specific activities in the range of 250-1,000 Ci/mmol. In vitro autoradiographs in rat brain slices with 11C-5-OH-DPAT, 11C-PPHT, and 11C-ZYY-339 revealed selective binding of the three radiotracers to the dopamine D-2 receptors in the striata.

IT 3899-07-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(radiosynthesis and in vitro evaluation of 2-(N-alkyl-N-1'-11C-propyl)amino-5-hydroxytetralin analogs as high affinity agonists for dopamine D2 receptors)

RN 3899-07-8 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)



REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 5 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:536677 HCAPLUS Full-text

DOCUMENT NUMBER: 131:299273

TITLE: Derivatives of (R)-2-amino-5-methoxytetralin: antagonists and inverse agonists at the dopamine D2A receptor

AUTHOR(S): Hook, Berit Backlund; Brege, Cecilia; Linnanen, Tero; Mikaels, Asa; Malmberg, Asa; Johansson, Anette M.

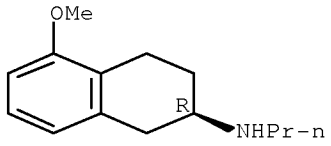
CORPORATE SOURCE: Organic Pharmaceutical Chemistry, Uppsala Biomedical Centre, Uppsala University, Uppsala, SE-751 23, Swed.

SOURCE: Bioorganic & Medicinal Chemistry Letters (1999), 9(15), 2167-2172
CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier Science Ltd.

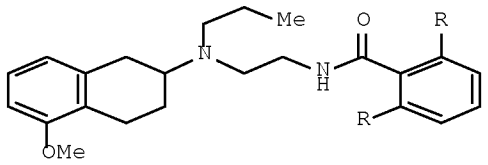
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 27 Aug 1999
AB A series of N-(arylmethyl)-substituted (R)-5-methoxy-2- (propylamino)tetralins has been prepared and evaluated for affinity and efficacy at dopamine D2A receptors. The novel compds. appeared to be antagonists or inverse agonists. (R)-2-(Benzylpropylamino)-5- methoxytetralin was characterized as a potent inverse agonist at D2A receptors in a [35S]GTPγS binding assay.
IT 101403-25-2P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
((R)-2-amino-5-methoxytetralin derivative antagonists and inverse agonists at dopamine D2A receptor)
RN 101403-25-2 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, (2R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 6 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1999:485957 HCAPLUS Full-text
DOCUMENT NUMBER: 131:243049
TITLE: Synthesis and pharmacology of the enantiomers of the potential atypical antipsychotic agents 5-OMe-BPAT and 5-OMe-(2,6-di-OMe)-BPAT
AUTHOR(S): Homan, Evert J.; Copinga, Swier; Unelius, Lena; Jackson, David M.; Wikstrom, Hakan V.; Grol, Cor J.
CORPORATE SOURCE: Department of Medicinal Chemistry, University Centre for Pharmacy, University of Groningen, Groningen, NL-9713 AV, Neth.
SOURCE: Bioorganic & Medicinal Chemistry (1999), 7(7), 1263-1271
CODEN: BMECEP; ISSN: 0968-0896
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 06 Aug 1999
GI



I

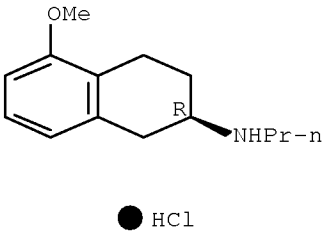
AB The optically pure enantiomers of the potential atypical antipsychotic agents methoxybenzamidoethyl-N-propylaminotetralin I (R = H) (5-MeO-BPAT) and methoxy-N-dimethoxybenzamidoethyl-N-n-propylaminotetralin I (R = MeO) were synthesized and evaluated for their in vitro binding affinities at α1-, α2-, and β-adrenergic, muscarinic, dopamine D1, D2A, and D3, and serotonin 5-HT1A and 5-HT2 receptors. In addition, their intrinsic efficacies at serotonin 5-HT1A receptors were established in vitro. Both enantiomers of I (R = H) had high affinities for dopamine D2A, D3, and serotonin 5-HT1A receptors, moderate affinities for α1-adrenergic and serotonin 5-HT2 receptors, and no affinity (Ki > 1000 nM) for the other receptor subtypes. Both enantiomers of I (R = MeO) had lower affinities for the dopamine D2A and the serotonin 5-HT1A receptor, compared to the enantiomers of I (R = H), and hence showed some selectivity for the dopamine D3 receptor. The interactions with the receptors were stereospecific, since the serotonin 5-HT1A receptor preferred the (S)-enantiomers of I while the dopamine D2A and D3 receptors preferred the (R)-enantiomers of I. The intrinsic efficacies at the serotonin 5-HT1A receptor were established by measuring their ability to inhibit VIP-induced cAMP production in GH4ZD10 cells expressing serotonin 5-HT1A receptors. Both enantiomers of I (R = H) behaved as full serotonin 5-HT1A receptor agonists in this assay, while both enantiomers of I (R = MeO) behaved as weak partial agonists. The potential antipsychotic properties of (S)- and (R)-I (R = H) were evaluated by establishing their ability to inhibit d-amphetamine-induced locomotor activity in rats, while their propensity to induce extrapyramidal side-effects (EPS) in man was evaluated by determining their ability to induce catalepsy in rats. Whereas (R)-I (R = H) was capable of blocking d-amphetamine-induced locomotor activity, indicative of dopamine D2 receptor antagonism, (S)-I (R = H) even enhanced the effect of d-amphetamine, suggesting that this compound has dopamine D2 receptor-stimulating properties. Since both enantiomers of I (R = H) also were devoid of cataleptogenic activity, they are interesting candidates for further exploring the dopamine D2/serotonin 5-HT1A hypothesis of atypical antipsychotic drug action.

IT 93601-85-5P 93601-86-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of propylbenzoylaminotetralins and their enantiomers as potential antipsychotic agents and their binding to adrenergic, dopamine, and serotonin receptors)

RN 93601-85-5 HCAPLUS

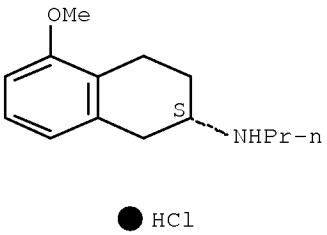
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, hydrochloride (1:1), (2R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



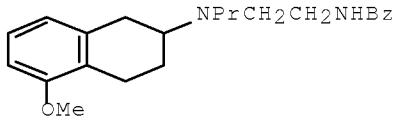
RN 93601-86-6 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, hydrochloride (1:1), (2S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 7 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1999:414226 HCAPLUS Full-text
DOCUMENT NUMBER: 131:170152
TITLE: Structural analogs of 5-OMe-BPAT: synthesis and interactions with dopamine D2, D3, and serotonin 5-HT1A receptors
AUTHOR(S): Homan, Evert J.; Kroodsma, Esther; Copinga, Swier; Unelius, Lena; Mohell, Nina; Wikstrom, Hakan V.; Grol, Cor J.
CORPORATE SOURCE: Department of Medicinal Chemistry, University Centre for Pharmacy, University of Groningen, Groningen, NL-9713, Neth.
SOURCE: Bioorganic & Medicinal Chemistry (1999), 7(6), 1111-1121
CODEN: BMECEP; ISSN: 0968-0896
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 07 Jul 1999
GI



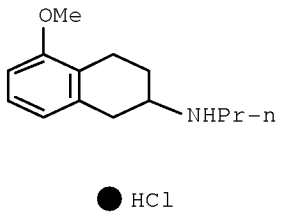
I

AB Several structural analogs of 5-OMe-BPAT (I), a representative of a series of 2-aminotetralin-derived benzamides with potential atypical antipsychotic properties, were synthesized and evaluated for their ability to bind to dopamine D2A, D3, and serotonin 5-HT1A receptors in vitro. The structure-affinity relationships revealed that the aromatic ring of the benzamide moiety of I contributes to the high affinities for all three receptor subtypes. Furthermore, I may interact with the dopamine D2 and D3 receptors through hydrogen bond formation with its carbonyl group. Investigation of the role of the amide hydrogen atom by amide N-alkylation was not conclusive, since conformational aspects may be responsible for the decreased dopaminergic affinities of the N'-alkylated analogs of I. The effects of amide modifications on serotonin 5-HT1A receptor affinity were less pronounced, suggesting that the benzamidoethyl side-chain of I as a whole enhances the affinity for this receptor subtype, probably through hydrophobic interactions with an accessory binding site. The structural requirements for the substituents at the basic nitrogen atom supported the hypothesis that the 2-aminotetralin moieties of the 2-aminotetralin-derived substituted benzamides may share the same binding sites as the 2-(di-n-propylamino)tetralins.

IT 3904-24-3
RL: RCT (Reactant); RACT (Reactant or reagent)
([(benzamidoethyl)amino]tetralins and their affinity for dopamine D2, D3, and serotonin 5-HT1A receptors)

RN 3904-24-3 HCAPLUS

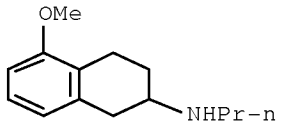
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, hydrochloride (9CI) (CA INDEX NAME)



REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 8 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1999:1963 HCAPLUS Full-text
DOCUMENT NUMBER: 130:191424
TITLE: 2-Aminotetralin-derived substituted benzamides with mixed dopamine D2, D3, and serotonin 5-HT1A receptor binding properties: a novel class of potential atypical antipsychotic agents
AUTHOR(S): Homan, Evert J.; Copinga, Swier; Elfstrom, Lotta; Van Der Veen, Trees; Hallema, Jan-Pieter; Mohell, Nina;

Unelius, Lena; Johansson, Rolf; Wikstrom, Hakan V.; Grol, Cor J.
CORPORATE SOURCE: Department of Medicinal Chemistry, University Centre for Pharmacy, University of Groningen, Groningen, NL-9713 AV, Neth.
SOURCE: Bioorganic & Medicinal Chemistry (1998), 6(11), 2111-2126
CODEN: BMECEP; ISSN: 0968-0896
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 04 Jan 1999
AB A new chemical class of potential atypical antipsychotic agents, based on the pharmacol. concept of mixed dopamine D2 receptor antagonism and serotonin 5-HT1A receptor agonism, was designed by combining the structural features of the 2-(N,N-di-n-propylamino)tetralins (DPATs) and the 2-pyrrolidinylmethyl-derived substituted benzamides in a structural hybrid. Thus, a series of 35 differently substituted 2-aminotetralin- derived substituted benzamides was synthesized and the compds. were evaluated for their ability to compete for [3H]-raclopride binding to cloned human dopamine D2A and D3 receptors, and for [3H]-8-OH-DPAT binding to rat serotonin 5-HT1A receptors in vitro. The lead compound of the series, 5-methoxy-2-[N-(2-benzamidoethyl)-N-n-propylamino]tetralin, displayed high affinities for the dopamine D2A receptor (Ki = 3.2 nM), the dopamine D3 receptor (Ki = 0.58 nM) as well as the serotonin 5-HT1A receptor (Ki = 0.82 nM). The structure-affinity relationships of the series suggest that the 2-aminotetralin moieties of the compds. occupy the same binding sites as the DPATs in all three receptor subtypes. The benzamidoethyl side chain enhances the affinities of the compds. for all three receptor subtypes, presumably by occupying an accessory binding site. For the dopamine D2 and D3 receptors, this accessory binding site may be identical to the binding site of the 2-pyrrolidinylmethyl-derived substituted benzamides.
IT 3904-24-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactant; preparation of 2-aminotetralin-derived substituted benzamides with mixed dopamine D2 and D3 and serotonin 5-HT1A receptor binding properties as novel atypical antipsychotic agents)
RN 3904-24-3 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, hydrochloride (9CI) (CA INDEX NAME)

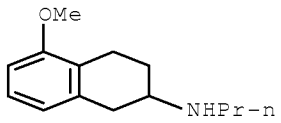


● HCl

REFERENCE COUNT: 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 9 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1997:582958 HCAPLUS Full-text
DOCUMENT NUMBER: 127:242822

ORIGINAL REFERENCE NO.: 127:47219a,47222a
TITLE: A novel series of 2-aminotetralins with high affinity and selectivity for the dopamine D3 receptor
AUTHOR(S): Boyfield, Izzy; Coldwell, Martyn C.; Hadley, Michael S.; Johnson, Christopher N.; Riley, Graham J.; Scott, Emma E.; Stacey, Rachel; Stemp, Geoffrey; Thewlis, Kevin M.
CORPORATE SOURCE: SmithKline Beecham Pharmaceuticals, New Frontiers Science Park, Essex, CM19 5AW, UK
SOURCE: Bioorganic & Medicinal Chemistry Letters (1997), 7(15), 1995-1998
CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 12 Sep 1997
AB A novel series of N-[4-(4-Phenylbenzoylamino)butyl]-1,2,3,4-tetrahydro-2-naphthylamines with high affinity and selectivity for the dopamine D3 receptor has been prepared The 5-cyclopropylmethyloxy, methanesulfonyloxy and trifluoromethanesulfonyloxy derivs. represent some of the highest affinity (pKi's 8.6-8.9) and most selective (200-320-fold) dopamine D3 receptor antagonists reported to date.
IT 3899-07-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of 2-aminotetralins with high affinity and selectivity for dopamine D3 receptor)
RN 3899-07-8 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

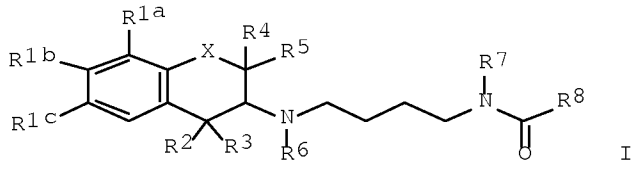
L22 ANSWER 10 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1996:708182 HCAPLUS Full-text
DOCUMENT NUMBER: 125:328313
ORIGINAL REFERENCE NO.: 125:61495a,61498a
TITLE: Preparation of bicyclic amine derivatives and their use as dopamine D3-receptor (ant)agonist antipsychotic agents
INVENTOR(S): Stemp, Geoffrey; Johnson, Christopher Norbert
PATENT ASSIGNEE(S): Smithkline Beecham Plc, UK
SOURCE: PCT Int. Appl., 63 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 9630333	A1	19961003	WO 1996-EP1238		19960321
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI					
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN					
AU 9651471	A	19961016	AU 1996-51471		19960321
EP 817767	A1	19980114	EP 1996-908103		19960321
EP 817767	B1	20000524			
R: BE, CH, DE, DK, FR, GB, IT, LI, NL					
JP 11503116	T	19990323	JP 1996-528899		19960321
ZA 9602362	A	19961118	ZA 1996-2362		19960325
US 6008219	A	19991228	US 1997-913919		19971029
PRIORITY APPLN. INFO.:			GB 1995-6169	A	19950327
			GB 1995-18573	A	19950912
			GB 1995-25480	A	19951213
			WO 1996-EP1238	W	19960321

OTHER SOURCE(S): MARPAT 125:328313
ED Entered STN: 29 Nov 1996

GI

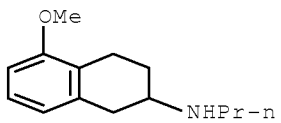


I

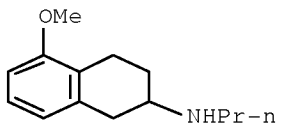
AB The title compds [I; X= direct bond, O, S, (un)substituted CH2; R1a-R1c = H, halogen, OH, CN, CF3, CF3O, trifluoromethanesulfonyloxy, alkyl, alkoxy, alkylthio, etc.; R2-R5, R7 = H, alkyl; R6 = H, alkyl, alkenyl, arylalkyl; R8 = (un)substituted Ph, (un)substituted naphthyl, (un)substituted 4-(heterocyclyl)phenyl, etc.], useful in therapy as agonists and antagonists of dopamine D3 receptors, particularly as antipsychotic agents (no data), are prepared and I-containing formulations presented. Thus, D3 antagonist 5-chloro-N-[4-(4-phenylbenzoylamino)butyl]-2-(R,S)-propylamino- 1,2,3,4-tetrahydronaphthalene hydrochloride was prepared and demonstrated a D3 receptor pKb in the range of 8.0-10.5.

IT 3899-07-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of bicyclic amine derivs. and their use as dopamine D3-receptor
(ant)agonist antipsychotic agents)

RN 3899-07-8 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)



L22 ANSWER 11 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1996:572080 HCAPLUS Full-text
DOCUMENT NUMBER: 125:264979
ORIGINAL REFERENCE NO.: 125:49144h,49145a
TITLE: Affinity for Dopamine D2, D3, and D4 Receptors of 2-Aminotetralins. Relevance of D2 Agonist Binding for Determination of Receptor Subtype Selectivity
AUTHOR(S): van Vliet, L. Alexander; Tepper, Pieter G.; Dijkstra, Durk; Damsma, Geert; Wikstroem, Hkan; Pugsley, Thomas A.; Akunne, Hyacinth C.; Heffner, Thomas G.; Glase, Shelly A.; Wise, Lawrence D.
CORPORATE SOURCE: Department of Medicinal Chemistry and Molecular Pharmacology, University of Groningen, Groningen, NL-9713 AV, Neth.
SOURCE: Journal of Medicinal Chemistry (1996), 39(21), 4233-4237
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 26 Sep 1996
AB A series of 2-aminotetralins, substituted with a methoxy or a hydroxy group on the 5- or 7-position, and with varying N-alkyl or N-arylalkyl substituents, were prepared and evaluated in binding assays for human dopamine (DA) D2, D3, and D4 receptors. Some members of this series were prepared in former studies, but were never tested in vitro with single receptor subtypes, and these were examined again. None of the tested 2-aminotetralins showed high affinity for the dopamine D4 receptor. However, a number of the 2-aminotetralins showed high affinity for both the D2 and the D3 DA receptors, while some had a reasonable selectivity for the DA D3 receptors. The affinities of the 2-aminotetralins for the D2L receptor depended on the type of radioligand (agonist or antagonist) used. The agonist affinity data, obtained by using the agonist ligand [3H]N-0437, are thought to be more relevant for calculating DA receptor subtype selectivity.
IT 3904-24-3P
RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)
(preparation and structure activity relations of aminotetralins as ligands for dopaminergic D2, D3, and D4 receptors)
RN 3904-24-3 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, hydrochloride (9CI) (CA INDEX NAME)



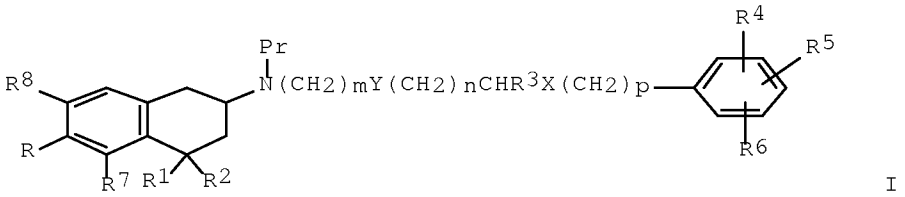
● HCl

L22 ANSWER 12 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1996:422384 HCAPLUS Full-text
DOCUMENT NUMBER: 125:86653
ORIGINAL REFERENCE NO.: 125:16345a,16348a
TITLE: Preparation of 2-(N-propylamino)-1,2,3,4-tetrahydronaphthalene dopaminergic D1 and D2 receptor agonist cardiovascular agents
INVENTOR(S): Montanari, Stefania; Cavalleri, Paolo; Fraire, Cristina; Grancini, Gian Carlo; Napoletano, Mauro; Santangelo, Francesco
PATENT ASSIGNEE(S): Zambon Group S.P.A., Italy
SOURCE: PCT Int. Appl., 142 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9608228	A2	19960321	WO 1995-EP3562	19950911
WO 9608228	A3	19960725		
W: AU, BY, CA, CZ, FI, HU, JP, KR, NO, NZ, PL, RU, SK, UA, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5674909	A	19971007	US 1995-465636	19950606
CA 2199484	A1	19960321	CA 1995-2199484	19950911
AU 9535653	A	19960329	AU 1995-35653	19950911
AU 694563	B2	19980723		
EP 781126	A2	19970702	EP 1995-932708	19950911
EP 781126	B1	20011212		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
HU 76837	A2	19971128	HU 1997-1331	19950911
JP 11501006	T	19990126	JP 1995-509893	19950911
RU 2149158	C1	20000520	RU 1997-106097	19950911
AT 210433	T	20011215	AT 1995-932708	19950911
ES 2168384	T3	20020616	ES 1995-932708	19950911
PT 781126	T	20020628	PT 1995-932708	19950911
FI 9701039	A	19970312	FI 1997-1039	19970312
NO 9701134	A	19970512	NO 1997-1134	19970312

PRIORITY APPLN. INFO.: IT 1994-MI1868 A 19940913
WO 1995-EP3562 W 19950911

OTHER SOURCE(S): MARPAT 125:86653
ED Entered STN: 18 Jul 1996
GI



I

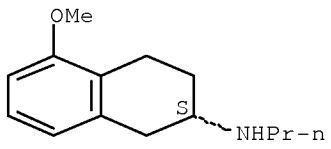
AB The title compds. (I; Markush definitions are provided within the document), useful for the treatment of arterial hypertension, congestive heart failure, renal failure, hypertension, and cerebrovascular insufficiencies, are prepared Thus, (S)-N-propyl-N-[6-[(1,4-benzodioxan-2- yl)methylamino]hexyl]-5,6-dihydroxy-1,2,3,4-tetrahydro-2-naphthylamine dihydrochloride was prepared and demonstrated a Ki of 0.66 nM against [3H]-domperidone on rat striated membrane-derived D2 receptors.

IT 101403-24-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of 2-(N-propylamino)-1,2,3,4-tetrahydronaphthalene dopaminergic
D1 and D2 receptor agonist cardiovascular agents)

RN 101403-24-1 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L22 ANSWER 13 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:915919 HCAPLUS Full-text

DOCUMENT NUMBER: 124:145572

ORIGINAL REFERENCE NO.: 124:27069a

TITLE: Synthesis, resolution and radioiodination of S(-)trans-5-hydroxy-2-[N-n-propyl-N-(3'-iodo-2'-propenyl)amino]tetralin-S(-)trans-5-OH-PIPAT: a new dopamine D2-like receptor ligand

AUTHOR(S): Chumpradit, Sumalee; Kung, Mei-Ping; Vessotskie, Janet; Kung, Hank F.

CORPORATE SOURCE: Deps. Radiology Pharmacology, University Pennsylvania, Philadelphia, PA, 19104, USA

SOURCE: Journal of Labelled Compounds & Radiopharmaceuticals (1995), 36(11), 1051-62
CODEN: JLCRD4; ISSN: 0362-4803

PUBLISHER: Wiley

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 124:145572

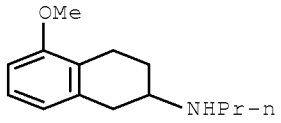
ED Entered STN: 14 Nov 1995

AB A new dopamine D2-like receptor ligand, (R,S)-trans-5-hydroxy-2-[N-n- propyl-N-(3'-iodo-2'-propenyl)amino]tetralin [(R,S)trans-5-OH-PIPAT] (I), based on high affinity dopamine receptor agonist 5-hydroxy-2-[N,N-(di-n- propyl)-2-amino]tetralin (5-OH-DPAT), was prepared The synthesis was achieved by a reductive amination of 5-methoxy-2-tetralone with n-propylamine, followed by N-alkylation, to afford 5-methoxy-N-propyl-N-2'- propynyl-2-aminotetralin (II). Reduction of II with tributyltin hydride gave the tri-Bu tin derivative, which was converted to (R,S)-trans-5-methoxy-2-[N- propyl-N-(3'-iodo-2'-propenyl)amino]tetralin (III) by an iododemetalation reaction. Demethylation of III gave I. The resolved (R)- and (S)-I were also quant.

prepared In vitro binding studies showed the stereoselectivity of this new compound for binding to dopamine D2-like receptors. (S)-(-)-I displayed high binding affinity, with inhibition consts. (Ki) of 0.38, 0.09 and 0.67 nM for dopamine D2H (expressed in HEK293 cells), d3 (expressed in Sf9 cells) and D4H receptors (expressed in CHO cells), resp. Using the same binding assays, the less active R(+) isomer displayed Ki values of 7.29, 4.87 and 16.44 nM for D2H, D3 and D4H receptors, resp. In addition, radiolabeling was successfully performed to give the final radiolabeled product, [125I](R)-(+)- or (S)-(-)-I.

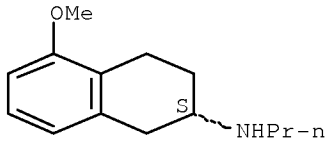
IT 3899-07-8 101403-24-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(synthesis, resolution and radioiodination of dopamine D2-like receptor ligand hydroxy[N-propyl-N-iodopropenyl)amino]tetralin)

RN 3899-07-8 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)



RN 101403-24-1 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

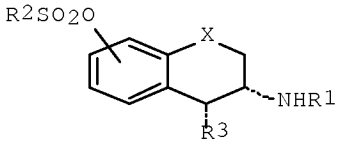


L22 ANSWER 14 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1995:761499 HCAPLUS Full-text
DOCUMENT NUMBER: 123:169373
ORIGINAL REFERENCE NO.: 123:30227a,30230a
TITLE: Preparation of centrally acting 5-8-substituted sulfone esters of N-monosubstituted 2-aminotetralins and related structures
INVENTOR(S): Wikstroem, Haakan Vilhelm; Barf, Tjeerd Andries; Dijkstra, Durk; Damsma, Geert
PATENT ASSIGNEE(S): Damsma-Bloem, Anette J., Neth.; Damsma, Anna; Damsma, Thijs; Damsma, Miriam
SOURCE: PCT Int. Appl., 72 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 9426703	A1	19941124	WO 1994-SE465	19940518
W: AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KG, KP, KR, KZ, LK, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK, TJ, TT, UA, US, UZ, VN				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9468110	A	19941212	AU 1994-68110	19940518
PRIORITY APPLN. INFO.:			SE 1993-1732 A	19930518
			WO 1994-SE465 W	19940518

OTHER SOURCE(S): MARPAT 123:169373
ED Entered STN: 29 Aug 1995
GI



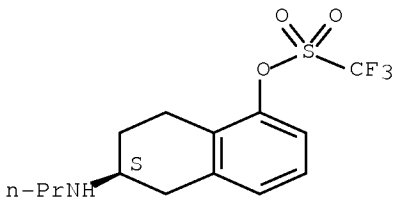
I

AB Title compds. I (R1 = G, C1-8 alkyl, alkenyl, alkynyl, cyclopropylalkyl, halo-C1-8 alkyl; X = H2C, O, S; R2 = F3C, CF3CF2, C1-C8 alkyl, substituted aryl; R3 = H, Me, Et, when R3 is Me or Et, it is always in a cis-relationship to the 2-amine substituent) or a salt thereof, are prepared R-(+)-8-methoxy-2-(n-propylamino)teralin XHCl preparation given was refluxed in HBr to give R-(+)-8-hydroxy-2-(n-propylamino)tetralin XHBr which with N=phenyltrifluoromethanesulfonimide, tetrabutylammonium hydrogensulfonate in CH2Cl2 were stirred at room temperature to give R-(+)-I (R1 = Pr, R2 = F3C which with SO2O is in the 8-position, R3 = H) as XCl salt. The utility of I to treat CNS disorders was demonstrated.

IT 161873-82-1P 167017-01-8P 167017-02-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of centrally acting aminotetralin alkylsufone esters)

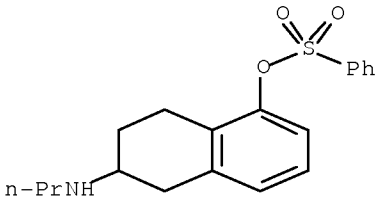
RN 161873-82-1 HCAPLUS
CN Methanesulfonic acid, trifluoro-, 5,6,7,8-tetrahydro-6-(propylamino)-1-naphthalenyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

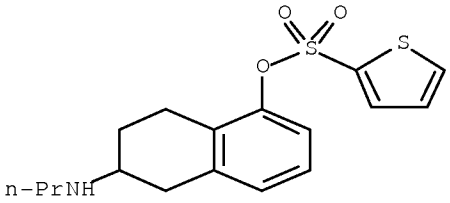


RN 167017-01-8 HCAPLUS
CN 1-Naphthalenol, 5,6,7,8-tetrahydro-6-(propylamino)-, 1-benzenesulfonate

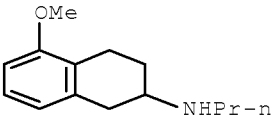
(CA INDEX NAME)



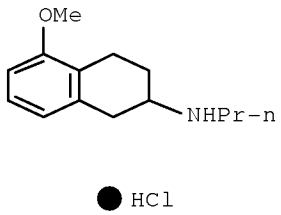
RN 167017-02-9 HCAPLUS
CN 2-Thiophenesulfonic acid, 5,6,7,8-tetrahydro-6-(propylamino)-1-naphthalenyl ester (CA INDEX NAME)



IT 3899-07-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of centrally acting aminotetralin alkylsufone esters)
RN 3899-07-8 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)

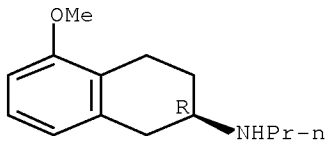


IT 3904-24-3P 101403-25-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of centrally acting aminotetralin alkylsufone esters)
RN 3904-24-3 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, hydrochloride (9CI) (CA INDEX NAME)

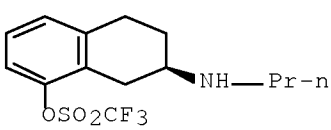


RN 101403-25-2 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, (2R)- (CA INDEX NAME)

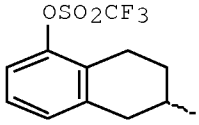
Absolute stereochemistry. Rotation (+).



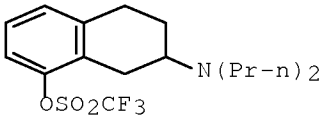
L22 ANSWER 15 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1995:481878 HCAPLUS Full-text
DOCUMENT NUMBER: 123:217738
ORIGINAL REFERENCE NO.: 123:38431a,38434a
TITLE: Synthesis and Evaluation of Pharmacological and Pharmacokinetic Properties of Monopropyl Analogs of 5-, 7-, and 8-[[(Trifluoromethyl)sulfonyl]oxy]-2-aminotetralins: Central Dopamine and Serotonin Receptor Activity
AUTHOR(S): Sonesson, Clas; Barf, Tjeerd; Nilsson, Jonas; Dijkstra, Durk; Carlsson, Arvid; Svensson, Kjell; Smith, Martin W.; Martin, Iain J.; Duncan, J. Neil; et al.
CORPORATE SOURCE: Department of Pharmacology, University of Goeteborg, Goeteborg, S-413 90, Swed.
SOURCE: Journal of Medicinal Chemistry (1995), 38(8), 1319-29
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 123:217738
ED Entered STN: 12 Apr 1995
GI



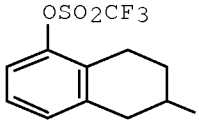
I



II



III



IV

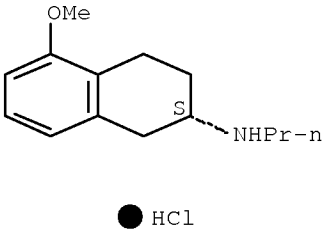
AB To explore further the structure-activity relationships of serotonergic and dopaminergic ligands, a series of enantiopure 5-, 7-, or 8-triflate (-OTf)-substituted 2-(monopropylamino)tetralins have been synthesized and evaluated in in vitro binding and in vivo biochem. and behavioral assays in rats. Consequently, the 8-OTf-substituted compound R-(+)-I was a potent and selective 5-HT1A (5-hydroxytryptamine) receptor agonist inducing a full-blown 5-HT syndrome in normal rats, while the corresponding 5-OTf-substituted compound S-(-)-II was a preferential dopamine (DA) autoreceptor agonist. A partial 5-HT syndrome was also observed for S-(-)-II, while the corresponding R-(+)-II was inactive at the DA and 5-HT receptors both in vitro and in vivo. Compds. I and II were major urinary metabolites following oral administration of their di-Pr analogs (III and IV, resp.). Thus I was proposed to be the metabolite responsible for the full-blown 5-HT syndrome seen after oral (but not s.c.) administration of III. Similarly, II was proposed to be the metabolite responsible for the partial 5-HT syndrome seen after oral (but not s.c.) administration of IV. The bioavailability of R-(+)-I (7.6%) appeared to be slightly lower than that of III (11.2%), although the in vitro metabolism of R-(+)-I appeared to be slower than that of III. Therefore first-pass metabolism was not thought to be the reason for the lower bioavailability of R-(+)-I as compared to III.

IT 93601-86-6P 101403-25-2P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(synthesis, receptor binding, and pharmacokinetics of monopropyl analogs of 5-, 7-, and 8-[[(trifluoromethyl)sulfonyl]oxy]-2-aminotetralins)

RN 93601-86-6 HCAPLUS

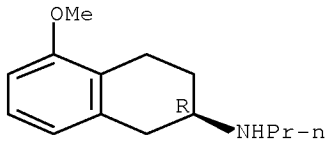
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, hydrochloride (1:1), (2S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



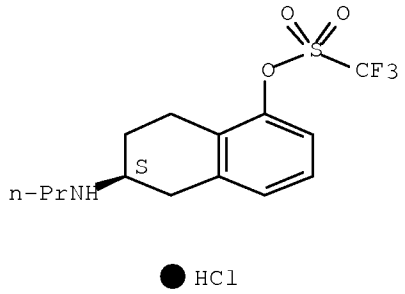
RN 101403-25-2 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, (2R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



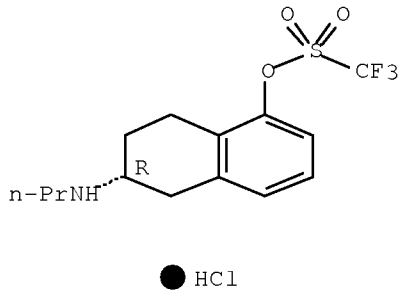
IT 866262-72-8P 866262-74-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(synthesis, receptor binding, and pharmacokinetics of monopropyl analogs of 5-, 7-, and 8-[[(trifluoromethyl)sulfonyl]oxy]-2-aminotetralins)
RN 866262-72-8 HCAPLUS
CN Methanesulfonic acid, 1,1,1-trifluoro-, (6S)-5,6,7,8-tetrahydro-6-(propylamino)-1-naphthalenyl ester, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.

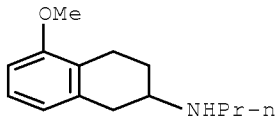


RN 866262-74-0 HCAPLUS
CN Methanesulfonic acid, 1,1,1-trifluoro-, (6R)-5,6,7,8-tetrahydro-6-(propylamino)-1-naphthalenyl ester, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



IT 3899-07-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(synthesis, receptor binding, and pharmacokinetics of monopropyl analogs of 5-, 7-, and 8-[[(trifluoromethyl)sulfonyl]oxy]-2-aminotetralins)
RN 3899-07-8 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)

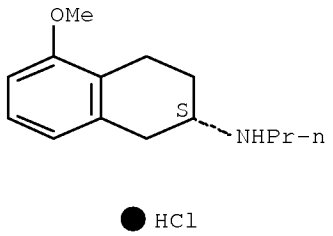


L22 ANSWER 16 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1995:362675 HCAPLUS Full-text
DOCUMENT NUMBER: 123:143456
ORIGINAL REFERENCE NO.: 123:25541a,25544a
TITLE: Substituted 2-aminotetralins as dopamine receptor agonists
INVENTOR(S): Sleevi, Mark C.; Minaskanian, Gevork; Moses, L. Meredith
PATENT ASSIGNEE(S): Whitby Research, Inc., USA
SOURCE: U.S., 18 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5382596	A	19950117	US 1993-102436	19930805
CA 2168097	C	19950216	CA 1994-2168097	19940805
CA 2168097	A1	19950216		
WO 9504532	A1	19950216	WO 1994-US8845	19940805
W: AU, CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9475207	A	19950228	AU 1994-75207	19940805
AU 682388	B2	19971002		
EP 717620	A1	19960626	EP 1994-925190	19940805

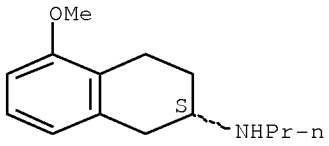
EP 717620 B1 20011031
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
JP 09501434 T 19970210 JP 1995-506531 19940805
JP 3839043 B2 20061101
AT 207745 T 20011115 AT 1994-925190 19940805
ES 2166379 T3 20020416 ES 1994-925190 19940805
PT 717620 T 20020429 PT 1994-925190 19940805
PRIORITY APPLN. INFO.: US 1993-102436 A 19930805
WO 1994-US8845 W 19940805
OTHER SOURCE(S): MARPAT 123:143456
ED Entered STN: 21 Feb 1995
GI For diagram(s), see printed CA Issue.
AB Optically active or racemic compds. represented by the formula I where R2 is OA and R3 is selected from the group consisting of H and OA; where A is H or is selected from the group consisting of hydrocarbyl radicals comprising between 1 and 3 carbon atoms, as well as COR4,CONHR4, CONR42, and CO2R4, with the proviso that when R3 is OA, then R2 and R3 may be bonded together to form the group OCH2O or OCO2. R4 is selected from the group consisting of alkyl and aromatic residues having from 1 to 20, preferably from 1 to 12, carbon atoms, for example, alkyl, optionally substituted with aromatic residues, and aromatic residues optionally substituted with alkyl radicals; n is an integer from 1 to 4; R5 is an unbranched alkyl chain comprising from 1 and 3 carbon atoms or a cyclopropylmethyl radical; R1 is alkoxy, cycloalkoxy and a cyclic ether of the formula II where m is an integer from 3 to 5; with the proviso that when R1 is alkoxy, then R3 cannot be H; and pharmaceutically-acceptable salts thereof. These compds. are useful for alleviating Parkinsonism, glaucoma, hyperprolactinemia and for inducing weight loss in mammals. Pharmacol. data showed high degrees of dopamine D2 vs. D1 receptor affinity and selectivity achieved with compds. of the current invention, as well as high degrees of dopamine D2 receptor in vitro functional activity and specificity (D2 vs. α2). Dopamine D2 receptor in vivo functional potency: ED50 (μmol/kg) in the range of 0.004 to 0.100. Pharmaceutical formulations were given.
IT 93601-86-6, (S)-1,2,3,4-Tetrahydro-5-methoxy-N-propyl-2-naphthalenamine hydrochloride salt 101403-24-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(substituted 2-aminotetralins as dopamine receptor agonists)
RN 93601-86-6 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, hydrochloride (1:1), (2S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

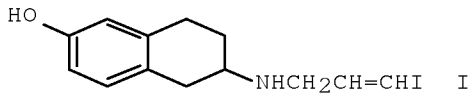


RN 101403-24-1 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, (2S)- (CA INDEX NAME)

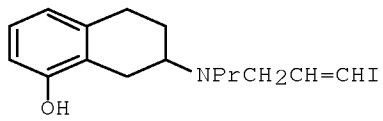
Absolute stereochemistry. Rotation (-).



L22 ANSWER 17 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1995:196540 HCAPLUS Full-text
DOCUMENT NUMBER: 122:9820
ORIGINAL REFERENCE NO.: 122:2185a,2188a
TITLE: Iodinated 2-Aminotetralins and 3-Amino-1-benzopyrans: Ligands for Dopamine D2 and D3 Receptors
AUTHOR(S): Chumpradit, Sumalee; Kung, Mei-Ping; Vessotskie, Janet; Foulon, Catherine; Mu, Mu; Kung, Hank F.
CORPORATE SOURCE: Department of Radiology, University of Pennsylvania, Philadelphia, PA, 19104, USA
SOURCE: Journal of Medicinal Chemistry (1994), 37(24), 4245-50
CODEN: JMCMAR; ISSN: 0022-2623
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 17 Nov 1994
GI



I



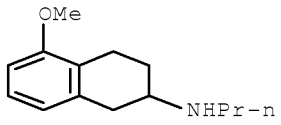
II

AB In developing selective ligands for dopamine D2 and D3 receptors, several iodinated 2-aminotetralins and 3-amino-1-benzopyrans, trans-7-hydroxy-2-[N-(3'-iodo-2'-propenyl)amino]tetralin (I), trans-monohydroxy-2-[N-propyl-N- (3'-iodo-2'-propenyl)amino]tetralins, and trans-monohydroxy-3,4-dihydro-3- [N-propyl-N-(3'-iodo-2'-propenyl)amino]-2H-1-benzopyrans. These compds. were evaluated for their binding profiles in several membrane prepns.: Spodoptera frugiperda (Sf9) cells expressing dopamine D2 (non-GTP coupled, low-affinity states) and D3 receptors, HEK293 cells expressing dopamine D2 receptors in high-affinity states (D2H), rat hippocampal homogenates for 5-HT1A receptors, and cerebellar homogenates for σ receptors. The mono-N-alkylated 2-aminotetralin I displayed high σ binding (Ki = 1.68 nM) with a moderate D3 binding (Ki = 30.2 nM). Derivs. with one N-Pr and one N-(3'-iodo-2'-propenyl) group generally displayed high to moderate affinity to D3 receptors. All of the active D3 ligands also displayed comparable binding to the high affinity states of D2 receptors in HEK293 cells. Among all of the tetralin derivs. tested, 5-OH-PIPAT (II) showed the highest binding affinity to D3 receptors

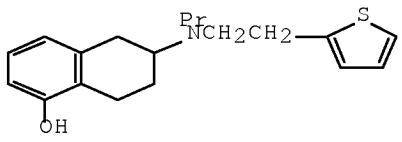
(Ki = 0.99 nM) and better selectivity (KiD2H/KiD3, KiD2/KiD3, Ki5-HT1A/KiD3 and Kiσ/KiD3 = 3.64, 327, 48.4, and 1250 nM, resp.), making it the best ligand for studying dopamine D2H and D3 receptors.

IT 3899-07-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of iodinated aminotetralins and aminobenzopyrans as ligands for
dopamine D2 and D3 receptors)

RN 3899-07-8 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)



L22 ANSWER 18 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1994:260480 HCAPLUS Full-text
DOCUMENT NUMBER: 120:260480
ORIGINAL REFERENCE NO.: 120:45805a,45808a
TITLE: Determination of the dopamine D2 agonist N-0923 and its major metabolites in perfused rat livers by HPLC-UV-atmospheric pressure ionization mass spectrometry
AUTHOR(S): Swart, P. J.; Oelen, W. E. M.; Bruins, A. P.; Tepper, P. G.; de Zeeuw, R. A.
CORPORATE SOURCE: Dep. Anal. Chem. Toxicol., Dep. Med. Chem., Groningen, 9713 AW, Neth.
SOURCE: Journal of Analytical Toxicology (1994), 18(2), 71-7
CODEN: JATOD3; ISSN: 0146-4760
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 28 May 1994
GI



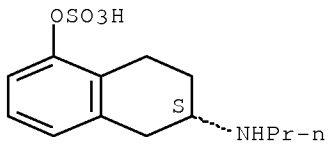
I

AB The metabolism of the dopamine D2 agonist N-0923 (I) was investigated by an in vitro isolated liver perfusion. Determining the metabolic profile and identity of the different metabolites was achieved by using high-performance liquid chromatog. with UV detection, combined with atmospheric pressure ionization mass spectrometry. Using this technique, no extensive sample cleanup is required, and the studies can be performed without radioactivity. In addition to previously observed metabolites, nine new metabolic products

were identified. All metabolites were exclusively excreted into the bile, except for the despropyl metabolite which was also detectable in the perfusate. 5-O-glucuronidation and N-depropylation followed by 5-O-glucuronidation are the most important metabolic routes. N-dealkylation of the thienylethyl group followed by 5-O-glucuronidation and sulfation is a second major metabolic pathway. Catechol formation of the despropyl metabolite with or without subsequent conjugation was not found. Catechol formation of the desthienylethyl metabolite occurred, but only its glucuronide conjugates were found. This study complements previous results of in vivo metabolic studies using the radiolabeled racemate N-0437, and it explains differences in bile excretion during isolated liver perfusions using N-0923 and radiolabeled N-0923.

IT 154714-31-5
RL: BIOL (Biological study)
(metabolite, of dopamine D2 agonist N-0923, in liver, HPLC-mass spectrometry study of)
RN 154714-31-5 HCAPLUS
CN 1-Naphthalenol, 5,6,7,8-tetrahydro-6-(propylamino)-, hydrogen sulfate (ester), (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L22 ANSWER 19 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1991:632141 HCAPLUS Full-text
DOCUMENT NUMBER: 115:232141
ORIGINAL REFERENCE NO.: 115:39561a,39564a
TITLE: Fluorescent probes for dopamine receptors: synthesis and characterization of fluorescein and 7-nitrobenz-2-oxa-1,3-diazol-4-yl conjugates of D-1 and D-2 receptor ligands
AUTHOR(S): Bakthavachalam, Venkatesalu; Baindur, Nandkishore; Madras, Bertha K.; Neumeyer, John L.
CORPORATE SOURCE: Res. Biochem. Inc., Natick, MA, 01760, USA
SOURCE: Journal of Medicinal Chemistry (1991), 34(11), 3235-41
CODEN: JMCMAR; ISSN: 0022-2623
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 115:232141
ED Entered STN: 29 Nov 1991
GI

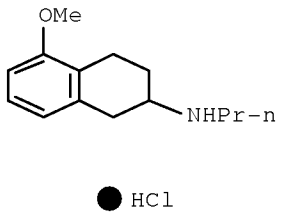
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Fluorescent probes, e.g., I, have been designed and developed for dopamine D-1 and D-2 receptors. Fluorescein and/or NBD (7-nitrobenz-2-oxa-1,3- diazol-4-yl) derivs. of PPHT (II) (D-2 agonist), spiperone (D-2 antagonist), SKF 38393 (III) (D-1 agonist), and SKF 83566 (IV) (D-1 antagonist) were synthesized via

their amino-functionalized analogs and all ligands were pharmacol. evaluated by measuring their ability to displace [3H]SCH 23390 and [3H]spiperone from D-1 and D-2 receptor sites in caudate putamen of monkeys (Macaca fascicularis). The fluorescein derivs. of II and IV and the NBD derivs. of spiperone and IV retained the high affinity and selectivity of the parent ligands. The NBD derivs., e.g., I, showed higher D-2 receptor affinity and selectivity than their parent ligands. The enantiomers of the fluorescent derivs. of II were also synthesized and were found to exhibit stereoselectivity in binding to the D-2 receptor, with the S enantiomers having a considerably higher affinity than their R analogs. In contrast to these results, the fluorescein derivative of SKF 38393 showed only a low affinity for the D-1 receptor.

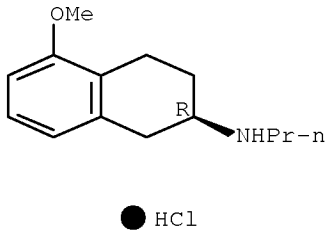
IT 3904-24-3P 93601-85-5P 93601-86-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and N-acylation of, with nitrophenylacetyl chloride)

RN 3904-24-3 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, hydrochloride (9CI) (CA INDEX NAME)



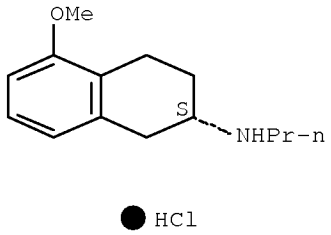
RN 93601-85-5 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, hydrochloride (1:1), (2R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



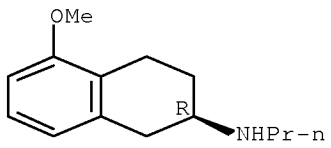
RN 93601-86-6 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, hydrochloride (1:1), (2S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L22 ANSWER 20 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1991:608147 HCAPLUS Full-text
DOCUMENT NUMBER: 115:208147
ORIGINAL REFERENCE NO.: 115:35525a,35528a
TITLE: Tricarbonylchromium complexes of 2-aminotetralin derivatives. Hydride displacement of aromatic methoxy groups
AUTHOR(S): Persson, Marie; Hacksell, Uli; Csoregh, Ingeborg
CORPORATE SOURCE: Uppsala Biomed. Cent., Uppsala Univ., Uppsala, S-751 23, Swed.
SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1991), (6), 1453-9
CODEN: JCPRB4; ISSN: 0300-922X
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 115:208147
ED Entered STN: 15 Nov 1991
AB Tricarbonylchromium complexes of methoxy-substituted 2-propionamido- and 2-aminotetralins have been prepared and the stereochem. of (2S)-endo-tricarbonyl[8-methoxy-2-(N-propylpropionamido)tetralin]chromium has been established by x-ray structure anal. The complexes could be demethoxylated by treatment with LiAlH4. This reaction occurred more readily with the endo than with the exo isomers. The fastest demethoxylation was observed with the tricarbonylchromium complex of 2-(2-methoxyphenyl)-N,N-dipropylethylamine.
IT 101403-25-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(acylation of)
RN 101403-25-2 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, (2R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

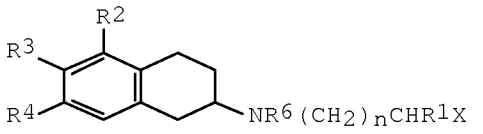


L22 ANSWER 21 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1991:535704 HCAPLUS Full-text

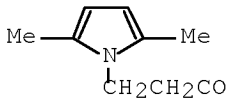
DOCUMENT NUMBER: 115:135704
ORIGINAL REFERENCE NO.: 115:23251a,23254a
TITLE: Preparation of substituted 2-aminotetralins useful as dopaminergics
INVENTOR(S): Minaskanian, Gevork; Peck, James V.
PATENT ASSIGNEE(S): Whitby Research, Inc., USA
SOURCE: PCT Int. Appl., 33 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9103459	A1	19910321	WO 1990-US4734	19900820
W: AU, BB, BG, BR, CA, FI, HU, JP, KP, KR, LK, MC, MG, MW, NO, RO, SD, SU				
RW: AT, BE, BF, BJ, CF, CG, CH, CM, DE, DK, ES, FR, GA, GB, IT, LU, ML, MR, NL, SE, SN, TD, TG				
AU 9064044	A	19910408	AU 1990-64044	19900820
US 5118704	A	19920602	US 1991-758887	19910911
PRIORITY APPLN. INFO.:			US 1989-401060 A	19890830
			WO 1990-US4734 A	19900820

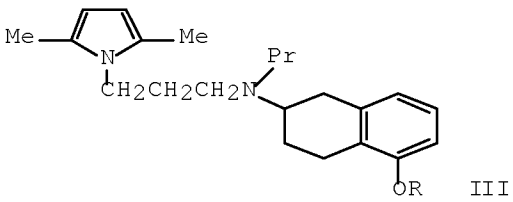
OTHER SOURCE(S): MARPAT 115:135704
ED Entered STN: 05 Oct 1991
GI



I



II



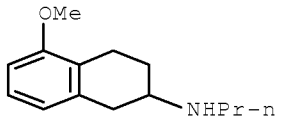
III

AB The title compds. [I; R1 = N-heterocycle, substituted amino; R2, R3, R4 = H, OH, alkoxy, acyl, aroyl, etc.; R6 = C1-4 alkyl; X = H, OH, R6, NH2, etc.; n = 1-4] are prepared A mixture of 5-methoxy-2-(propylamino)tetralin, pyrrole compound II, and BH3-Me3N complex was refluxed in xylene to give ether III (R = Me), which was hydrolyzed with BBr3 in CH2Cl2 under N to give tetralinol salt III.HCl (R = H) after treatment with ethereal HCl. III.HCl showed Ki of 26 nM for dopamine D2-receptor binding affinity, vs. 110 nM with a reference Also prepared and tested were 8 addnl. I.

IT 3899-07-8, 1,2,3,4-Tetrahydro-5-methoxynaphthalene
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with dimethylpyrrolepropanoic acid, in preparation of dopaminergics)

RN 3899-07-8 HCAPLUS

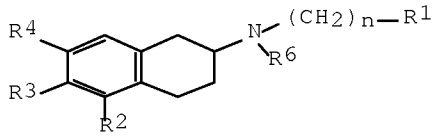
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)



L22 ANSWER 22 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1991:485442 HCAPLUS Full-text
DOCUMENT NUMBER: 115:85442
ORIGINAL REFERENCE NO.: 115:14511a
TITLE: A method of reducing body weight and food intake using a dopamine D2 receptor agonist
INVENTOR(S): Belluzzi, James D.
PATENT ASSIGNEE(S): Whitby Research, Inc., USA
SOURCE: PCT Int. Appl., 31 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 9013294	A1	19901115	WO 1990-US2135		19900419
W: AU, CA, JP, KR					
RW: AT, BE, CH, DE, DK, ES, FR, GB, IT, LU, NL, SE					
AU 9054398	A	19901129	AU 1990-54398		19900419
EP 483152	A1	19920506	EP 1990-906612		19900419
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE					
US 5234945	A	19930810	US 1991-641221		19910104
PRIORITY APPLN. INFO.:			US 1989-349091	A	19890509
			WO 1990-US2135	A	19900419

OTHER SOURCE(S): MARPAT 115:85442
ED Entered STN: 06 Sep 1991
GI



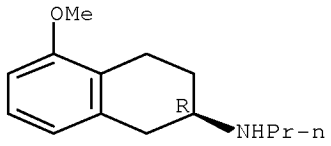
I

AB A method for treating the symptoms of obesity comprises administration of an effective amount of optically active [especially the (-) stereoisomers] I [R1 = Me, (un)substituted Ph, pyridyl, hydroxyphenyl, etc; R2-R4 = H, OA(A = hydrocarbyl, C(O)R5, C(O)NR5 (R5 = hydrocarbyl)); n = 1-3; R6 = C1-3 alkyl; with provisions]. Thus, racemic 2-(N-n-propylamino)-5- methoxytetralin was resolved into its (+) and (-) isomers, which were then converted to (+)-5-

hydroxy-2-[N-n-propyl-N-2-(2- thienyl)ethylamine]tetralin (II) and the corresponding (-) isomer (III) by a known method. In animal studies, III was slightly more potent than d-amphetamine in producing weight loss, although both produced significant weight loss. While considerably less potent than III, II showed a slight trend to produce weight loss. Animals did not regain lost weight quickly after removal of III.

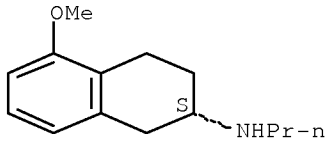
IT 101403-25-2
RL: RCT (Reactant); RACT (Reactant or reagent)
((thienyl)ethylation of)
RN 101403-25-2 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, (2R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

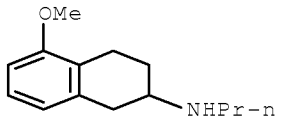


IT 101403-24-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn and (thienyl)ethylation of, in antiobesity agent preparation)
RN 101403-24-1 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



IT 3899-07-8
RL: PROC (Process)
(resolution of, in antiobesity agent preparation)
RN 3899-07-8 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)

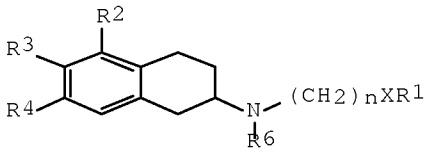


L22 ANSWER 23 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN

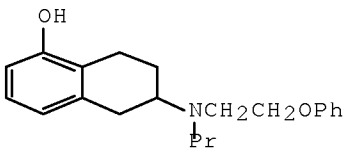
ACCESSION NUMBER: 1991:428926 HCAPLUS Full-text
DOCUMENT NUMBER: 115:28926
ORIGINAL REFERENCE NO.: 115:5077a,5080a
TITLE: Preparation of substituted 2-aminotetralins as D2 dopaminergic agents
INVENTOR(S): Peck, James V.; Minaskanian, Gevork
PATENT ASSIGNEE(S): Whitby Research, Inc., USA
SOURCE: PCT Int. Appl., 44 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 9100727	A1	19910124	WO 1990-US3761		19900702
W: AU, CA, DK, FI, JP, KR, NO					
RW: AT, BE, CH, DE, DK, ES, FR, GB, IT, LU, NL, SE					
CA 2065450	A1	19910106	CA 1990-2065450		19900702
AU 9060720	A	19910206	AU 1990-60720		19900702
EP 463119	A1	19920102	EP 1990-911220		19900702
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE					
US 5274003	A	19931228	US 1992-837229		19920218
US 5358971	A	19941025	US 1993-131845		19931004
US 5430056	A	19950704	US 1994-200338		19940223
PRIORITY APPLN. INFO.:			US 1989-375583	A	19890705
			WO 1990-US3761	A	19900702
			US 1992-837229	A3	19920218

OTHER SOURCE(S): CASREACT 115:28926; MARPAT 115:28926
ED Entered STN: 27 Jul 1991
GI



I

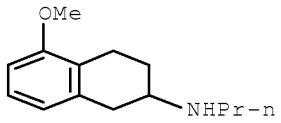


II

AB Optically active or racemic title compds. I [X = CH2, O, S, N(sic); R1 = (substituted) aryl, heteroaryl, arylmethyl, aryloxymethyl, etc.; R2, R3, R4 = H, OH, hydrocarbyloxy optionally substituted by COR5, CONHR5, or CO2R5; R5 = alkyl, aryl; n = 1-4; R6 = alkyl; several provisos] were prepared I bind selectively to dopamine D2 receptors and are useful for treating glaucoma, schizophrenia, Parkinsonism, etc. For example, reductive alkylation of 2-(N-propylamino)-4-methoxytetralin by PhOCH2CO2H and BH3.NMe3 in refluxing xylene, followed by O-demethylation with pyridine-HCl at 200° or with BBr3 in CH2Cl2 at room temperature, gave title compound II. In receptor binding assays in vitro, Ki values for II were: D2 125, D1 12,000 and α2 11,000 nM, vs. 110, 1000, and 190 for compound N-0437, a potent D2 agonist. Prepns. of addnl. I are described, plus biol. data for 3 more I.

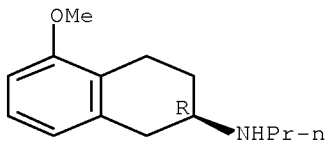
IT 3899-07-8, 2-(N-Propylamino)-5-methoxytetralin
RL: RCT (Reactant); RACT (Reactant or reagent)
(reductive alkylation of, by carboxylic acids)

RN 3899-07-8 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)

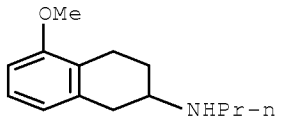


L22 ANSWER 24 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1989:205495 HCAPLUS Full-text
DOCUMENT NUMBER: 110:205495
ORIGINAL REFERENCE NO.: 110:33935a,33938a
TITLE: Microdialysis and striatal dopamine release: stereoselective actions of the enantiomers of N-0437
AUTHOR(S): Timmerman, Wia; Westerink, Ben H. C.; De Vries, Jan B.; Tepper, Pieter G.; Horn, Alan S.
CORPORATE SOURCE: Dep. Pharm., State Univ. Groningen, Groningen, 9713 AW, Neth.
SOURCE: European Journal of Pharmacology (1989), 162(1), 143-50
CODEN: EJPHAZ; ISSN: 0014-2999
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 10 Jun 1989
AB An intracerebral dialysis method was used to test both enantiomers of the very potent and selective dopamine (DA) D-2 agonist 2-(N-propyl-N-2-thienylethylamino)-5-hydroxytetralin (N-0437) for their actions on DA receptors in the striatum of the rat. (-)-N-0437 induced a 60% decrease in DA release, which was independent of the presence or absence of a kainic acid lesion placed unilaterally in the striatum. Stereotyped behavior was apparent following administration of the (-) enantiomer. Thus, (-)-N-0437 displayed an agonistic action on both pre- and postsynaptic D-2 receptors. (+)-N-0437 did not induce any effect in the release model after peripheral administration nor did it induce any form of stereotypy. A comparison between the effects of (-)-N-0437 after oral (10 μmol/kg) and transdermal (10 μmol/kg) administration showed the advantages of the latter mode of administration. Transdermal application induced a much longer duration of action of the drug (13 h) in comparison with the oral mode (5 h). Thus, transdermal administration may be a very useful method of drug application for therapeutic use.
IT 101403-25-2P, (+)-5-Methoxy-N-propyl-2-aminotetralin
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 101403-25-2 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, (2R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

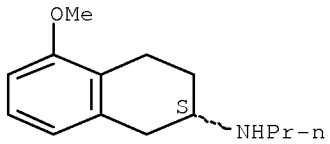


IT 3899-07-8, (±)-5-Methoxy-N-propyl-2-aminotetralin
101403-24-1, (-)-5-Methoxy-N-propyl-2-aminotetralin
RL: BIOL (Biological study)
(resolution into isomers of)
RN 3899-07-8 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)



RN 101403-24-1 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

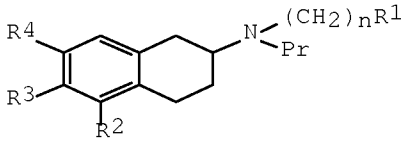


L22 ANSWER 25 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1988:473163 HCAPLUS Full-text
DOCUMENT NUMBER: 109:73163
ORIGINAL REFERENCE NO.: 109:12241a,12244a
TITLE: Preparation of substituted 2-aminotetralins as dopaminergic agonists.
INVENTOR(S): Horn, Alan S.
PATENT ASSIGNEE(S): Nelson Research and Development Co., USA
SOURCE: Eur. Pat. Appl., 10 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 7
PATENT INFORMATION:

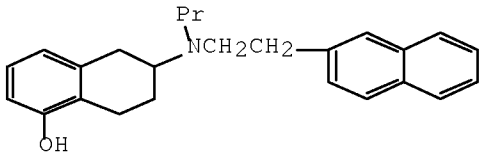
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 254989	A2	19880203	EP 1987-110341	19870717
EP 254989	A3	19880921		
EP 254989	B1	19900926		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
AT 56944	T	19901015	AT 1987-110341	19870717
ES 2031855	T3	19930101	ES 1987-110341	19870717
AU 8776197	A	19880204	AU 1987-76197	19870728

AU 605777	B2	19910124			
JP 63035547	A	19880216	JP 1987-188675		19870728
PRIORITY APPLN. INFO.:			US 1986-891223	A	19860728
			EP 1987-110341	A	19870717

OTHER SOURCE(S): MARPAT 109:73163
ED Entered STN: 02 Sep 1988
GI



I

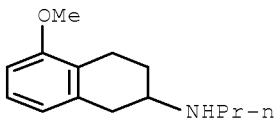


II

AB Aminotetralins I (R1 = organic radical containing fused aromatic ring; R2 - R4 = H, OA; A = H, hydrocarbyl, COR5; R5 = hydrocarbyl; n = 2, 3; ≥1 of R2 - R4 = H; ≥1 of R2 - R4 ≠ H; R2 and R4 both ≠ OA) are prepared as dopaminergic receptor agonists, especially useful for reducing intraocular pressure. Reductive alkylation of 2-(N-n-propylamino)-5- methoxytetralin by 2-benzothienylacetic acid using Me3N.BH3 in refluxing xylene under N, followed by demethylation using BBr3, gave [propyl(benzothienylethyl)amino]hydroxytetralin II. The IC50 of II for displacement of its 2-thienyl analog from dopamine D2 receptors in vitro (calf corpus striatum homogenate) was 0.56 nM (Kd = 1.6 nM and bmax = 26.0 picomol/g for tritiated analog). In contrast, II had IC50 > 100,000 at D1 dopamine receptors. An aqueous isotonic saline solution for ophthalmic use contains 0.001-1% I along with stabilizer, preservative, and buffer to pH 4.0-7.5.

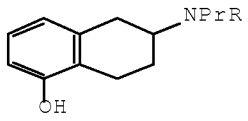
IT 3899-07-8, 2-(N-Propylamino)-5-methoxytetralin
RL: RCT (Reactant); RACT (Reactant or reagent)
(reductive alkylation of, by arylacetic acids)

RN 3899-07-8 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)



L22 ANSWER 26 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1986:207119 HCAPLUS Full-text
DOCUMENT NUMBER: 104:207119
ORIGINAL REFERENCE NO.: 104:32825a,32828a
TITLE: Structure-activity relationships of dopaminergic 5-hydroxy-2-aminotetralin derivatives with

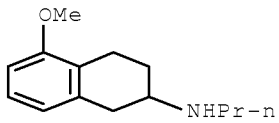
functionalized N-alkyl substituents
AUTHOR(S): Seiler, Max P.; Stoll, Andre P.; Closse, Annemarie; Frick, Willy; Jaton, Annelise; Vigouret, Jean Marie
CORPORATE SOURCE: SANDOZ Ltd., Basel, CH-4002, Switz.
SOURCE: Journal of Medicinal Chemistry (1986), 29(6), 912-17
CODEN: JMCMAR; ISSN: 0022-2623
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 104:207119
ED Entered STN: 14 Jun 1986
GI



I

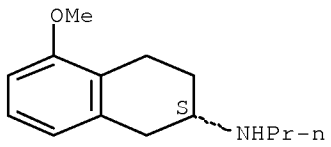
AB 5-Hydroxy-2-aminotetralin derivs. in which one N-alkyl substituent carries a functional group, e.g. I [R = (CH2)3CN, (CH2)4NH2, (CH2)3OH, CH2CH2Ph], were prepared and their dopaminergic activities compared with those of 5-hydroxy-2-(dipropylamino)tetralin (5-OH-DPAT) and known ergolines. Several members of the series demonstrated high affinities in dopamine (DA) receptor binding and DA agonist properties in the rotational behavior model in the range of known potent ergolines. The results suggest that the accessory binding site for the larger N-alkyl substituent of the 5-hydroxy-2-aminotetraline can accommodate various neutral and bulky functionalities and is probably identical with the site(s) to which the 8-substituents of the ergolines bind.

IT 3899-07-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(amidation by, of protected glycine)
RN 3899-07-8 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)



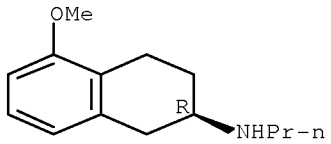
IT 101403-24-1P 101403-25-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and demethylation of)
RN 101403-24-1 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 101403-25-2 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, (2R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

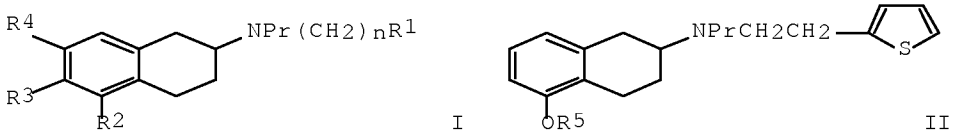


L22 ANSWER 27 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1986:206951 HCAPLUS Full-text
DOCUMENT NUMBER: 104:206951
ORIGINAL REFERENCE NO.: 104:32785a,32788a
TITLE: Substituted 2-aminotetralins
INVENTOR(S): Horn, Alan S.
PATENT ASSIGNEE(S): Nelson Research and Development Co., USA
SOURCE: U.S., 6 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 7
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4564628	A	19860114	US 1984-640685	19840813
US 4657925	A	19870414	US 1985-811768	19851220
US 4722933	A	19880202	US 1986-839976	19860317
US 4743618	A	19880510	US 1986-891262	19860728
US 4882352	A	19891121	US 1987-47882	19870508
US 4885308	A	19891205	US 1988-206193	19880613
US 4996226	A	19910226	US 1989-397749	19890926
US 5177112	A	19930105	US 1991-757336	19910910
US 5268385	A	19931207	US 1991-793848	19911118
PRIORITY APPLN. INFO.:			US 1983-455144 A2	19830103
			US 1984-640685 A2	19840813
			US 1985-811768 A2	19851220
			US 1986-839976 A2	19860317
			US 1986-891223 A2	19860728
			US 1986-891262 A2	19860728
			US 1986-811768 A2	19861220
			US 1987-47882 A2	19870508
			US 1988-206193 A3	19880613

US 1989-371207 B1 19890626
US 1989-438357 B1 19891117

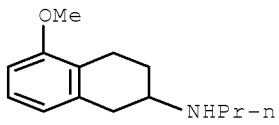
OTHER SOURCE(S): CASREACT 104:206951; MARPAT 104:206951
ED Entered STN: 14 Jun 1986
GI



AB Aminotetralins I (R1 = 3- or 4-pyridyl, CPh2CN, 4-indolyl, 2- or 3-thienyl, -furyl, or -pyrrolyl, 4-imidazolyl; R2-R4 = H, OH, alkanoyloxy, aromatic acyloxy; n = 2, 3) are prepared as dopaminergic agonists for treatment of central nervous system disorders, e.g. Parkinsonism (no data). Thus, 5-methoxy-2-(N-propylamino)tetralin and 2-thiopheneacetic acid underwent reductive amination by Me3N.BH3 in xylene to give, after acidification, 54% thienylethylaminotetralin derivative II-HCl (R5 = Me), which was demethylated by BBr3 in CH2Cl2 to give 90% II-HCl (R5 = H). I were also prepared by a different method starting from the corresponding tetralones.

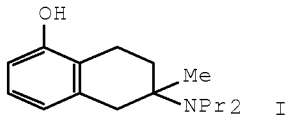
IT 3899-07-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(reductive amination of, with thiopheneacetic acid)

RN 3899-07-8 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)



L22 ANSWER 28 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1986:199957 HCAPLUS Full-text
DOCUMENT NUMBER: 104:199957
ORIGINAL REFERENCE NO.: 104:31471a,31474a
TITLE: 5-Hydroxy-2-methyl-2-(di-n-propylamino)tetralin: Synthesis and central pharmacological effects
AUTHOR(S): Hacksell, Uli; Arvidsson, Lars Erik; Johansson, Anette M.; Nilsson, J. Lars G.; Sanchez, Domingo; Andersson, Bengt; Lindberg, Per; Wikstroem, Haakan; Hjorth, Stephan; et al.
CORPORATE SOURCE: Uppsala Biomed. Cent., Univ. Uppsala, Uppsala, S-751 23, Swed.
SOURCE: Acta Pharmaceutica Suecica (1985), 22(2), 65-74
CODEN: APSXAS; ISSN: 0001-6675
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 14 Jun 1986

GI



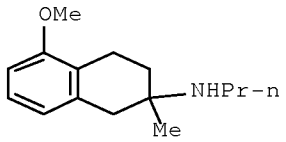
I

AB (+-)-5-Hydroxy-2-methyl-2-(dipropylamino)tetralin (I) [85592-61-6] was prepared and tested for central pharmacol. effects in rats. I reversed reserpine-induced akinesia and this effect could not be blocked by pretreatment with haloperidol, suggesting that the effect was not mediated via dopamine receptors. It increased the synthesis rate of 5-hydroxytryptamine. In contrast to 5-hydroxy-2-(dipropylamino)tetralin, which is a potent dopamine-receptor agonist, I had no effect on central dopamine receptors.

IT 85592-47-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and propionylation and reduction of)

RN 85592-47-8 HCAPLUS

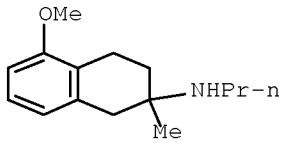
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-2-methyl-N-propyl- (CA INDEX NAME)



IT 85592-48-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

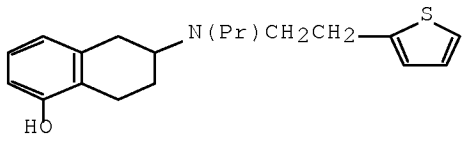
RN 85592-48-9 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-2-methyl-N-propyl-, hydrochloride (9CI) (CA INDEX NAME)



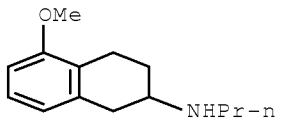
L22 ANSWER 29 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1986:180037 HCAPLUS Full-text
DOCUMENT NUMBER: 104:180037
ORIGINAL REFERENCE NO.: 104:28349a,28352a
TITLE: Synthesis and radioreceptor binding activity of N-0437, a new, extremely potent and selective D2 dopamine receptor agonist
AUTHOR(S): Horn, A. S.; Tepper, P.; Van der Weide, J.; Watanabe, M.; Grigoriadis, D.; Seeman, P.
CORPORATE SOURCE: Dep. Pharm., Univ. Groningen, Groningen, 9713 AW, Neth.
SOURCE: Pharmaceutisch Weekblad, Scientific Edition (1985), 7(5), 208-11
CODEN: PWSEDI; ISSN: 0167-6555
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 01 Jun 1986
GI



I

AB The synthesis of a potent and selective D2 dopamine receptor agonist, N-0437 (I) [92206-54-7] of the 2-aminotetralin group is described. The results of a radioreceptor binding assay using a homogenate of porcine anterior pituitary as a tissue source for D2 dopamine receptors and [3H]spiperone as radioligand demonstrate that I is one of the most potent compds. so far evaluated in this test system.
IT 3899-07-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with 2-thiopheneacetic acid)
RN 3899-07-8 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)

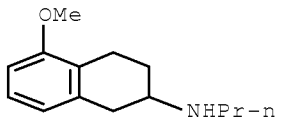


L22 ANSWER 30 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1986:45758 HCAPLUS Full-text
DOCUMENT NUMBER: 104:45758
ORIGINAL REFERENCE NO.: 104:7281a,7284a
TITLE: Therapeutic composition for treating Parkinson's disease
INVENTOR(S): Horn, Allan S.
PATENT ASSIGNEE(S): Nelson Research and Development Co., USA

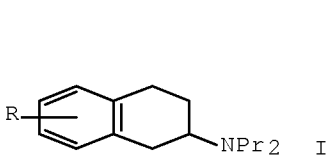
SOURCE: Ger. Offen., 13 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3417859	A1	19851114	DE 1984-3417859	19840514

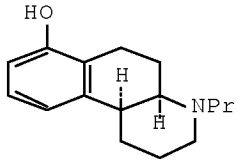
PRIORITY APPLN. INFO.: DE 1984-3417859 19840514
OTHER SOURCE(S): CASREACT 104:45758
ED Entered STN: 23 Feb 1986
AB 2-(N-Phenylethyl-N-propylamino)-5-hydroxytetralin (I) is a D-2 dopamine receptor agonist, and can be used for the treatment of Parkinson's disease. I salts and esters are also active. Thus, I was 40 times as potent as apomorphine in an in vitro test system using the intermediate hypophyseal lobe of the rat. I was prepared by N-phenylethylation of 2-(propylamino)-5-methoxytetralin and subsequent O-demethylation of the reaction product.
IT 3899-07-8
RL: BIOL (Biological study)
(phenylatation and hydrolysis of, antiparkinsonism drug by)
RN 3899-07-8 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)



L22 ANSWER 31 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1985:55640 HCAPLUS Full-text
DOCUMENT NUMBER: 102:55640
ORIGINAL REFERENCE NO.: 102:8597a,8600a
TITLE: Resolved monophenolic 2-aminotetralins and 1,2,3,4,4a,5,6,10b-octahydrobenzo[f]quinolines: structural and stereochemical considerations for centrally acting pre- and postsynaptic dopamine-receptor agonists
AUTHOR(S): Wikstroem, Haakan; Andersson, Bengt; Sanchez, Domingo; Lindberg, Per; Arvidsson, Lars Erik; Johansson, Anette M.; Nilsson, J. Lars G.; Svensson, Kjell; Hjorth, Stephan; Carlsson, Arvid
CORPORATE SOURCE: Dep. Pharmacol., Univ. Goeteborg, Goeteborg, S-400 33, Swed.
SOURCE: Journal of Medicinal Chemistry (1985), 28(2), 215-25
CODEN: JMCMAR; ISSN: 0022-2623
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 24 Feb 1985
GI



I



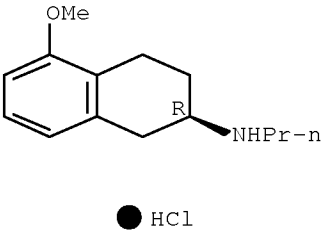
II

AB The resolved title compds. 2-(dipropylamino)-5-hydroxy- and -7-hydroxytetralins I (R = 5- or 7-OH) and cis- and trans-propylbenzo[f]quinolinols (II) prepared by demethylation of the appropriate methoxy compound were evaluated for a detailed structure-activity relationship of their pre- and postsynaptic dopamine receptor-agonist activity. Male rats were used in the biochem. and motor activity expts. (S)-2-(Dipropylamino)-5-hydroxytetralin (I; R = 5-OH) [68643-08-3] and (R)-2-(dipropylamino-7-hydroxytetralin (I; R = 7-OH) [82730-72-1] were the most active compds.

IT 93601-85-5P 93601-86-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and demethylation of)

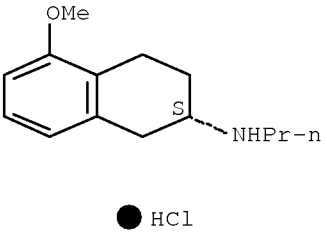
RN 93601-85-5 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, hydrochloride (1:1), (2R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 93601-86-6 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, hydrochloride (1:1), (2S)- (CA INDEX NAME)

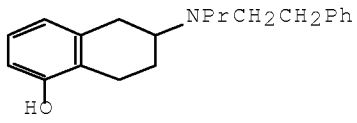
Absolute stereochemistry. Rotation (-).



L22 ANSWER 32 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1984:604321 HCAPLUS Full-text
DOCUMENT NUMBER: 101:204321
ORIGINAL REFERENCE NO.: 101:30814h,30815a
TITLE: Selective D-2 dopamine receptor agonist
INVENTOR(S): Horn, Alan S.
PATENT ASSIGNEE(S): Nelson Research and Development Co., USA
SOURCE: U.S., 3 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4465692	A	19840814	US 1982-455197	19820103
GB 2157950	A	19851106	GB 1984-11483	19840504
GB 2157950	B	19881102		
FR 2563731	A1	19851108	FR 1984-7057	19840507
FR 2563731	B1	19890324		
JP 60246315	A	19851206	JP 1984-100334	19840518
CA 1248537	A1	19890110	CA 1984-454789	19840522

PRIORITY APPLN. INFO.: US 1982-455197 19820103
OTHER SOURCE(S): CASREACT 101:204321; MARPAT 101:204321
GI

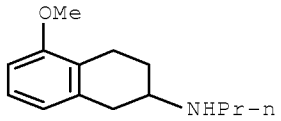


I

AB 5-Hydroxy-2-(phenethylpropylamino)tetralin (I) [87857-27-0] prepared as the HCl salt [71787-90-1] is a selective dopamine D2 receptor stimulator in humans. Thus, I prepared by reducing phenylacetic acid [103-82-2] with NaBH4 followed by addition of 5-methoxy-2-(propylamino)tetralin [3899-07-8] and tested in vitro showed potent selective D2 receptor agonist activity.

IT 3899-07-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with phenylacetic acid)

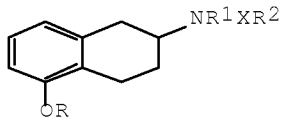
RN 3899-07-8 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)



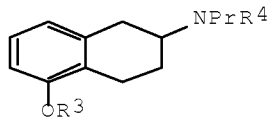
L22 ANSWER 33 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1984:34293 HCAPLUS Full-text
DOCUMENT NUMBER: 100:34293
ORIGINAL REFERENCE NO.: 100:5311a,5314a
TITLE: Tetraline derivatives
INVENTOR(S): Seiler, Max P.; Stoll, Andre
PATENT ASSIGNEE(S): Sandoz Ltd., Switz.
SOURCE: U.S., 7 pp. Cont.-in-part of U.S. Ser. No. 186,878, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 4410519	A	19831018	US 1981-243267		19810312
ZA 8005648	A	19820428	ZA 1980-5648		19800912
PRIORITY APPLN. INFO.:			CH 1979-8347	A	19790914
			CH 1980-5547	A	19800718
			US 1980-186878	A2	19800912

ED Entered STN: 12 May 1984
GI



I

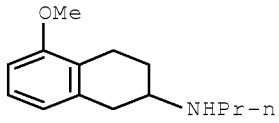


II

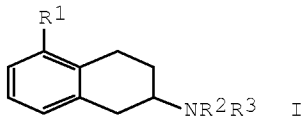
AB Optically active or racemic aminotetralins I (R = H, acyl; R1 = alkyl; R2 = cyano, N3, substituted NH2, carbonyloxy, acyl, OH, F, CH:CH2, Cl, SO2Me2, SOMe, SMe; X = alkylene) were prepared Thus aminotetraline II (R3 = Me, R4 = H) was alkylated with I(CH2)3OH to give II [R4 = (CH2)3OH], which was chlorinated and treated with MeSH to give II [R4 = (CH2)3SMe]. The latter was demethylated to give II [R3 = OH, R4 = (CH2)3SMe]. (-)-II.HCl [R3 = H, R4 = (CH2)3CN] was active for several hours as an antiparkinson agent at 1 mg/kg i.p. in rats.

IT 3899-07-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(alkylation of, with iodopropanol)

RN 3899-07-8 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)

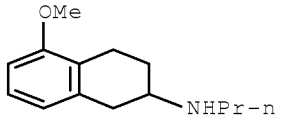


L22 ANSWER 34 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1983:605619 HCAPLUS Full-text
DOCUMENT NUMBER: 99:205619
ORIGINAL REFERENCE NO.: 99:31464h,31465a
TITLE: QSAR of N-alkylated 2-aminotetralins as central dopamine receptor stimulating agents
AUTHOR(S): Lien, Eric J.; Nilsson, J. Lars G.
CORPORATE SOURCE: Sch. Pharm., Univ. South. California, Los Angeles, CA, 90033, USA
SOURCE: Acta Pharmaceutica Suecica (1983), 20(4), 271-6
CODEN: APSXAS; ISSN: 0001-6675
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 12 May 1984
GI



I

AB The central dopamine-receptor stimulatory activities of a series of 28 N-alkylated 2-aminotetralins (I; R1 = HO or MeO; R2 = alkyl or phenethyl; R3 = H or alkyl; R4 = H or MeO) were subjected to multiple regression anal. Activities of 26 of the 28 compds. can be correlated by means of a 5-parameter (8-term) equation. The most important parameters appear to be the presence of the 5-OH group, the length of the longer substituent, and the thickness of the shorter substituent (LR2; BR2). Hydrophobicity seems to have only a minor influence on the activity. Sym. N-substituents with chain length no more than 3 carbons also contribute pos. to the receptor binding. The results obtained are in agreement with a recently proposed model.
IT 3899-07-8
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(dopaminergic agonist activity of, structure in relation to)
RN 3899-07-8 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)



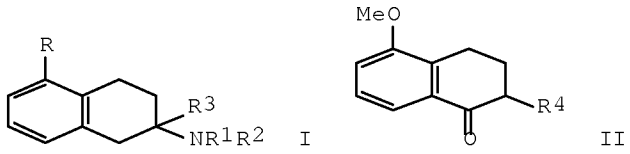
L22 ANSWER 35 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1983:405381 HCAPLUS Full-text
DOCUMENT NUMBER: 99:5381

ORIGINAL REFERENCE NO.: 99:973a,976a
TITLE: Therapeutically useful Tetralin derivatives
INVENTOR(S): Arvidsson, Folke Lars Erik; Carlsson, Per Arvid Emil; Hacksell, Uli Alf; Hjorth, John Stephan Mikael; Johansson, Anette Margareta; Lindberg, Per Lennart; Nilsson, John Lars Gunnar; Sanchez, Domingo; Wikstroem, Hakan Vilhelm
PATENT ASSIGNEE(S): Swed.
SOURCE: PCT Int. Appl., 34 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8204042	A1	19821125	WO 1982-SE160	19820510
W: AU, DK, FI, HU, JP, NO, RO, SU, US				
RW: AT, BE, CF, CG, CH, CM, DE, FR, GA, GB, LU, NL, SE, SN, TD, TG				
AU 8284550	A	19821207	AU 1982-84550	19820510
JP 58500714	T	19830506	JP 1982-501585	19820510
EP 91437	A1	19831019	EP 1982-901557	19820510
R: AT, BE, CH, DE, FR, GB, LI, LU, NL, SE				
DK 8205761	A	19821228	DK 1982-5761	19821228
NO 8300040	A	19830107	NO 1983-40	19830107
FI 8302108	A	19830610	FI 1983-2108	19830610

PRIORITY APPLN. INFO.: SE 1981-2922 A 19810511
WO 1982-SE160 A 19820510

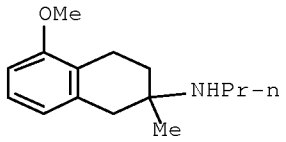
OTHER SOURCE(S): MARPAT 99:5381
ED Entered STN: 12 May 1984
GI



AB Tetralins I (R = OH, acyloxy, carbamoyloxy, allyloxy, PhCH2O; R1-R3 = alkyl) were prepared Thus tetralone II (R4 = H) was methoxycarbonylated to form II (R4 = CO2Me), which was methylated, reduced, and aminated to give I (R = OMe, R1 = R2 = H, R3 = Me). The amine was acylated with EtCOCl then reduced twice, yielding I (R1 = R2 = Pr). Hydrolysis gave I (R = OH, R1 = R2 = Pr, R3 = Me)(III). At 20 mg/kg s.c. III increased motor activity in reserpinized rats from 3.5 ± 0.5 to 121 = 14 counts/30 min. Its activity was not blocked by haloperiol.

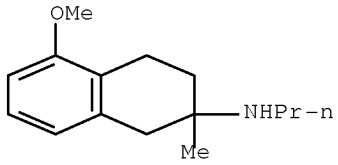
IT 85592-47-8P 85592-55-6P 85592-59-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and acylation of)

RN 85592-47-8 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-2-methyl-N-propyl- (CA INDEX NAME)



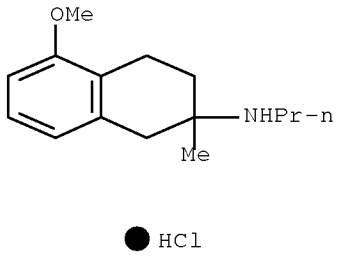
RN 85592-55-8 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-2-methyl-N-propyl-, (+)- (CA INDEX NAME)

Rotation (+).

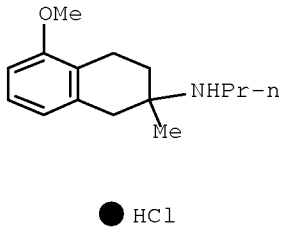


RN 85592-59-2 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-2-methyl-N-propyl-, hydrochloride, (-)- (9CI) (CA INDEX NAME)

Rotation (-).

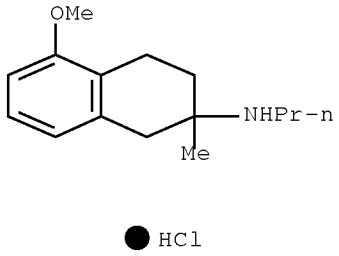


IT 85592-48-9P 85592-54-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 85592-48-9 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-2-methyl-N-propyl-, hydrochloride (9CI) (CA INDEX NAME)



RN 85592-54-7 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-2-methyl-N-propyl-, hydrochloride, (+)- (9CI) (CA INDEX NAME)

Rotation (+).

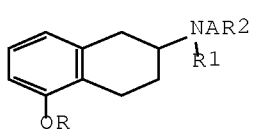


L22 ANSWER 36 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1981:480577 HCAPLUS Full-text
DOCUMENT NUMBER: 95:80577
ORIGINAL REFERENCE NO.: 95:13619a,13622a
TITLE: Tetraline derivatives and medicaments containing these compounds
INVENTOR(S): Seiler, Max Peter; Stoll, Andre
PATENT ASSIGNEE(S): Sandoz A.-G., Switz.
SOURCE: Eur. Pat. Appl., 23 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

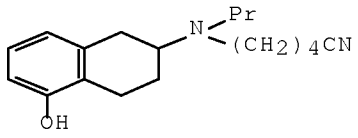
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 26848	A1	19810415	EP 1980-105275	19800904
EP 26848	B1	19830504		
R: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
AT 3204	T	19830515	AT 1980-105275	19800904
FI 8002808	A	19810315	FI 1980-2808	19800908
IL 61013	A	19840831	IL 1980-61013	19800910
DK 8003902	A	19810315	DK 1980-3902	19800912
AU 8062382	A	19810319	AU 1980-62382	19800912
AU 542340	B2	19850221		
ZA 8005648	A	19820428	ZA 1980-5648	19800912
CA 1162934	A1	19840228	CA 1980-360185	19800912

ES 495024	A1	19841016	ES 1980-495024		19800912
JP 56051437	A	19810509	JP 1980-127851		19800913
PRIORITY APPLN. INFO.:			CH 1979-8347	A	19790914
			CH 1980-5547	A	19800718
			EP 1980-105275	A	19800904

OTHER SOURCE(S): MARPAT 95:80577
ED Entered STN: 12 May 1984
GI



I

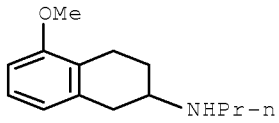


II

AB I (R = H or physiol. cleavable acyl; R1 = C1-4 alkyl; A = C1-5 alkylene; R2 = halogen, cyano, azido, etc.) were prepared as dopamine receptors (no data). Thus, 4 g 2-(propylamino)-5-tetralinol, 3.8 g (Me2CH)2NEt, and 2.5 g Br(CH2)4CN in 100 mL DMF were stirred 2 days at 60° to give II.

IT 3899-07-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(alkylation of, with iodopropanol)

RN 3899-07-8 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)

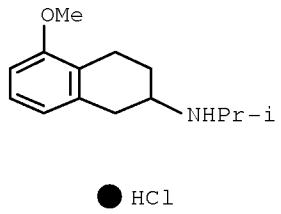


L22 ANSWER 37 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1979:604218 HCAPLUS Full-text
DOCUMENT NUMBER: 91:204218
ORIGINAL REFERENCE NO.: 91:32751a,32754a
TITLE: N-Alkylated 2-aminotetralins: central dopamine-receptor stimulating activity
AUTHOR(S): Hacksell, Uli; Svensson, Uno; Nilsson, J. Lars G.; Hjorth, Stephan; Carlsson, Arvid; Wikstroem, Haakan; Lindberg, Per; Sanchez, Domingo
CORPORATE SOURCE: Biomed. Cent., Univ. Uppsala, Uppsala, S-75123, Swed.
SOURCE: Journal of Medicinal Chemistry (1979), 22(12), 1469-75
CODEN: JMCMAR; ISSN: 0022-2623
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 91:204218
ED Entered STN: 12 May 1984

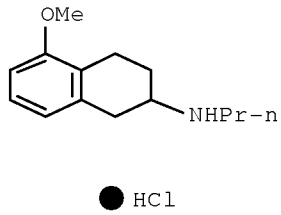
AB The title compds. I (R = HO or MeO; R2 = R3 = H, alkyl, etc.) as HBr, HCl, or oxalate salts were prepared from 5-methoxy-2-tetralone [32940-15-1]. The compds. were tested biochem. and behaviorally for dopaminergic activity using reserpinized rats. An Et or a Pr group on the N were optimal for activity, whereas the absence of either one resulted in inactive compds. Structure-activity relations are discussed.

IT 3864-46-8P 3904-24-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and behavioral and dopaminergic activities of)

RN 3864-46-8 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-(1-methylethyl)-, hydrochloride (9CI) (CA INDEX NAME)



RN 3904-24-3 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, hydrochloride (9CI) (CA INDEX NAME)



L22 ANSWER 38 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1965:90659 HCAPLUS Full-text
DOCUMENT NUMBER: 62:90659
ORIGINAL REFERENCE NO.: 62:16154b-c
TITLE: The synthesis of alkoxy-1,2,3,4-tetrahydronaphthalene derivatives. I. 2-Amino-, alkylamino-, and dialkylamino derivatives
AUTHOR(S): Ames, D. E.; Evans, D.; Grey, T. F.; Islip, P. J.; Richards, K. E.
CORPORATE SOURCE: Parke Davis Co., Ltd., Hounslow, UK
SOURCE: Journal of the Chemical Society (1965), (April), 2636-41
CODEN: JCSOA9; ISSN: 0368-1769
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 62:90659
ED Entered STN: 22 Apr 2001

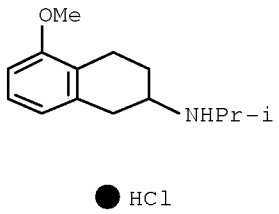
GI For diagram(s), see printed CA Issue.

AB A series of the title compds., e.g. I, via dialkoxynaphthalenes and II, has been prepared for pharmacol. testing.

IT 3864-46-8 3899-07-8 3902-41-8
3904-24-3
(Derived from data in the 7th Collective Formula Index (1962-1966))

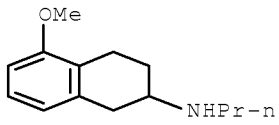
RN 3864-46-8 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-(1-methylethyl)-, hydrochloride (9CI) (CA INDEX NAME)



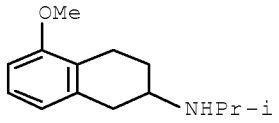
RN 3899-07-8 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)



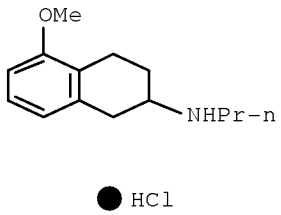
RN 3902-41-8 HCAPLUS

CN 2-Naphthylamine, 1,2,3,4-tetrahydro-N-isopropyl-5-methoxy- (7CI, 8CI) (CA INDEX NAME)



RN 3904-24-3 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, hydrochloride (9CI) (CA INDEX NAME)

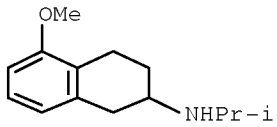


L22 ANSWER 39 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1965:90658 HCAPLUS Full-text
DOCUMENT NUMBER: 62:90658
ORIGINAL REFERENCE NO.: 62:16153b-h,16154a-b
TITLE: Potential psychotropic drugs. I. Synthesis of naphthyl-containing analogs of N,N-dimethyltryptamine and lysergic acid
AUTHOR(S): Pacheco, Henri; Gaige, Rene
CORPORATE SOURCE: Inst. Natl. Sci. Appl., Villeurbanne
SOURCE: Bulletin de la Societe Chimique de France (1965), (3), 861-8
CODEN: BSCFAS; ISSN: 0037-8968
DOCUMENT TYPE: Journal
LANGUAGE: French
OTHER SOURCE(S): CASREACT 62:90658
ED Entered STN: 22 Apr 2001
GI For diagram(s), see printed CA Issue.
AB A series of compds. (I and II) was prepared because of their formal resemblance to N,N-dimethyltryptamine and lysergic acid. 1-C10H7CH2CH2Br (0.1 mole) and 0.3 mole appropriate amine heated 8-12 hrs. at 80-100° in an autoclave, cooled, and poured slowly into 100 cc. H2O containing 0.4 mole AcCl gave the corresponding 1-C10H7CH2CH2NRR'.HCl (III) (method A). 1-C10H7COCl treated at 0° with 3 mole equivs. amine in Et2O or C6H6 yielded the corresponding 1-C10H7COCH2NRR' (IV) (NRR', m.p., and % yield given): NH2, 180°, 65; MeNH, 146-7°, 34; Me2N, 62-3°, 31; EtNH, 146°, 47; Et2N, 71-2°, 61; morpholino. 116-17°, 63; piperidino, -- (b0.6 180-90°), --; pyrrolidino, -- (b0.25 183°), --. The appropriate N-unsubstituted amide (0.01 mole), 0.015 mole monosubstituted IV, or 0.02 mole disubstituted IV in 50 cc. Et2O refluxed 1 hr. with 0.015 mole LiAlH4 in dry Et2O yielded the corresponding III (method B). By these methods were prepared the following III (NRR', m.p., and % yield by method A and by method B given): NH2, 245°, --, 34; MeNH, 170°, 54, 22; 1-C10H7CH2CH2NMe, 158°, 10 (by-product), --; Me2N, 213°, --, 62; Et2N, 163°, --, 39; iso-PrNH, 180°, 42, --; pyrrolidino, 206°, 20, --; morpholino, 217°, 27, 21; piperidino, 258°, 49, 46; 1-C10H7CH2CN alkylated with NaNH2 and a suitable alkyl halide, and the product reduced with LiAlH4 and treated with HCl gave the corresponding 1-C10H7CHRCH2CH2CN.HCl (R, m.p., % yield, % yield of free base, and Rf on Whatman Number 1 paper impregnated with KH2PO4 and developed with BuOH saturated with H2O given): Me, 268° (95% EtOH), 55, 91.6, 0.382; Et, 181-2° (95% EtOH-Et2O), 40, 90.5, 0.462; iso-Pr, 202-3° (absolute EtOH-iso-Pr2O), 56, 86, 0.503; PhCH2, 174-6° (absolute EtOH-iso-Pr2O), 54, 94, 0.708. 3,4,5-(MeO)3C6H2COCl (1 mole) and 3 moles suitable amine in C5H5N kept 1 hr. at room temperature and diluted with H2O gave the corresponding V (R, R1, R2, m.p., and % yield given): H, H, Me, 99-100° (C6H6-petr. ether), 39.4; Me, H, H, 142° (95% EtOH-petr. ether), 33; Et, H, H, 100°, 18.4; PhCH2, H, H, 118°, 24.4. 1-C10H7CHMeCOCl (24.5 g.) added slowly at 0° to 150 cc. 6% MeNH2 in C6H6 yielded 14.2 g. 1-C10H7CHMeCONHMe (VI), m. 136-7°. VI (9.59 g.) added in small portions to 3.42 g. LiAlH4, stirred 10 hrs. at room temperature, and the

product treated with HCl yielded 59% I.HCl (R1 = R2 = Me, R3 = R4 = H) (VII.HCl), m. 260° (absolute EtOH-C6H6), Rf 0.812; VII b0.2 115°, n28D 1.6035. 1-C10H7CH2CHMeOH (15.25 g.), 50 cc. 40% HBr, and 10 cc. concentrated H2SO4 heated 2 hrs. on a water bath, and the organic phase decanted and treated again in the same manner during 1 hr. yielded 71% 1-C10H7CH2CHBrMe (VIII), b0.2 121°, n21D 1.619. VIII (24.9 g.) and 150 cc. 6% MeNH2 in C6H6 heated 14 hrs. at 100° in an autoclave gave 57% I (R1 = R4 = H, R2 = R3 = Me) (IX), b0.15 102°, n22.5D 1.6185; IX.HCl m. 140° (AcEt-petr. ether), Rf 0.574. 1-C10H7CHMeCOCl with Me2Zn yielded 64% 1-C10H7CHMeAc (X), b0.1 108°, n24D 1.5975; 2,4-dinitrophenylhydrazone m. 213°. X reduced with KBH4 in MeOH gave 72% 1-C10H7CHMeCHMeOH, m. 94°, which with HBr gave 62.5% 1-C10H7CHMeCHBrMe (XI), b0.1 131°, n27D 1.615. XI with MeNH2 yielded 6.4% I (R1 = R2 = R3 = Me, R4 = H), b0.15 118°, n23D 1.589; HCl salt m. 205° (Me2CO-Et2O). 1-C10H7CH2CH2NHMe (3.7 g.) and 3.6 g. CH2:CHCO2Me heated 5 hrs. at 95-100°, and the product treated in Et2O with HCl gave 70-90% I.HCl, (R1 = R2 = H, R3 = Me, R4 = MeO2CCH2CH2), m. 153°, Rf 0.670; free base b0.03 165°, n28D 1.569 (method C). The appropriate amine (0.02 mole) and the amide or ester of ClCH2CH2CO2H in 30 cc. EtOH heated 4 hrs. at 95-100°, heated 1 hr. with 0.2 mole Na2CO3 or 0.4 mole NaHCO3, and the product treated with dry HCl in Et2O yielded the corresponding I (method D). 1-C10H7CHMeCHBrMe or 1-C10H7CHMeCH2Br (0.01 mole) heated 20 hrs. at 90° with Me2NCH2CH2CO2Me yielded a small amount of , R1, R2, R4, Method, M.p., % yield; Rf, H, H, EtO2CCH2CH2, D, 140°, 38; 0.755, H, H, Et2NOCCH2CH2, D, 158°, 54; 0.650, H, H, Me2CHNHCOCH2CH2, D, 159°, 42; 0.660, Me, H, Et2NOCCH2CH2, D, 259°, 9; 0.809, Me, Me, MeO2CCH2CH2 (oxalate), C, 214°, small; 0.695 I (R1 = H, R2 = R3 = Me, R4 = MeO2CCH2CH2), b0.03 162-3°, n23D 1.563, Rf 0.7; oxalate m. 130°. Similarly were prepared the I.HCl (Rf = Me) listed in the table.

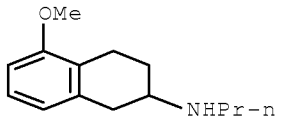
IT 3864-46-8P, 2-Naphthylamine, 1,2,3,4-tetrahydro-N-isopropyl-5-methoxy-, hydrochloride 3899-07-8P, 2-Naphthylamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- 3902-41-8P, 2-Naphthylamine, 1,2,3,4-tetrahydro-N-isopropyl-5-methoxy- 3904-24-3P, 2-Naphthylamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, hydrochloride
RL: PREP (Preparation)
(preparation of)

RN 3864-46-8 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-(1-methylethyl)-, hydrochloride (9CI) (CA INDEX NAME)

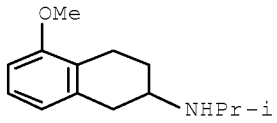


● HCl

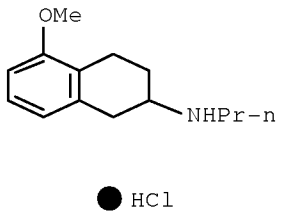
RN 3899-07-8 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)



RN 3902-41-8 HCAPLUS
CN 2-Naphthylamine, 1,2,3,4-tetrahydro-N-isopropyl-5-methoxy- (7CI, 8CI) (CA INDEX NAME)



RN 3904-24-3 HCAPLUS
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, hydrochloride (9CI) (CA INDEX NAME)



Search History

```
L1            1 SEA ABB=ON  PLU=ON  US2007-587637/APPS

     FILE 'REGISTRY' ENTERED AT 13:55:21 ON 01 AUG 2008
L2            7 SEA ABB=ON  PLU=ON  (101470-23-9/BI OR 50-36-2/BI OR 54-11-5/BI
                 OR 59-92-7/BI OR 64-17-5/BI OR 855127-36-5/BI OR 9002-62-4/BI)

                D SAVE
                ACT RIC637STRA/A
               ---------
L3              STR
L4         1920 SEA SSS FUL L3
               ---------
                ACT RIC637STRB/A
               ---------
L5              STR
L6  (      1920)SEA SSS FUL L5
L7              STR
L8          143 SEA SUB=L6 SSS FUL L7
               ---------
L9              STRUCTURE UPLOADED
L10           6 SEA SUB=L4 SSS SAM L9
L11           0 SEA ABB=ON  PLU=ON  L10 AND L2
L12         142 SEA SUB=L4 SSS FUL L9

     FILE 'HCAPLUS' ENTERED AT 14:01:30 ON 01 AUG 2008
L13         168 SEA ABB=ON  PLU=ON  L12

     FILE 'REGISTRY' ENTERED AT 14:05:07 ON 01 AUG 2008
L14             STRUCTURE UPLOADED
L15           1 SEA SUB=L4 SSS SAM L14
L16          22 SEA SUB=L4 SSS FUL L14
L17           1 SEA ABB=ON  PLU=ON  L16 AND L2

     FILE 'HCAPLUS' ENTERED AT 14:06:14 ON 01 AUG 2008
L18          40 SEA ABB=ON  PLU=ON  L16
L19         144 SEA ABB=ON  PLU=ON  SCHELLER D?/AU
L20        1242 SEA ABB=ON  PLU=ON  HANSEN K?/AU
L21           1 SEA ABB=ON  PLU=ON  (L19 OR L20) AND L18

     FILE 'HCAPLUS' ENTERED AT 14:17:19 ON 01 AUG 2008
L22          39 SEA ABB=ON  PLU=ON  L18 NOT L21
```